MATTHEW G. BEVIN
GOVERNOR

CHARLES G. SNAVELY
SECRETARY

R. BRUCE SCOTT
DEPUTY SECRETARY

ENERGY AND ENVIRONMENT CABINET

300 SOWER BOULEVARD
FRANKFORT, KENTUCKY 40601
TELEPHONE: 502-564-3350
TELEFAX: 502-564-7484

September 5, 2019

Ms. Mary Walker
Acting Regional Administrator
U.S. EPA, Region 4
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, GA 30303-8909

Dear Ms. Walker:

On behalf of the Commonwealth of Kentucky, the Energy and Environment Cabinet (Cabinet) respectfully requests that the EPA approve the enclosed revisions to the Jefferson County portion of the Kentucky State Implementation Plan (SIP). The Cabinet received a letter from the Louisville Metro Air Pollution Control District (District) on August 2, 2019 requesting the following amended regulations be submitted on their behalf.

1. Regulation 1.02 *Definitions*, Version 15 – Replace current version in the Jefferson County SIP;
2. Regulation 1.04 *Performance Tests*, Version 7 – Replace current version in the Jefferson County SIP;
3. Regulation 6.13 *Standard of Performance for Existing Storage Vessels for Volatile Organic Compounds,* Version 8 - Replace current version in the Jefferson County SIP;
4. Regulation 6.21 *Standard of Performance for Existing Gasoline Loading Facilities at Bulk Terminals*, Version 3 – Replace current version in the Jefferson County SIP;
5. Regulation 6.31 *Standard of Performance for Existing Miscellaneous Metal Parts and Products Surface Coating Operations,* Version 7 - Replace current version in the Jefferson County SIP;
6. Regulation 7.12 *Standard of Performance for New Storage Vessels for Volatile Organic Compounds,* Version 8 - Replace current version in the Jefferson County SIP;
7. Regulation 7.20 *Standard of Performance for New Gasoline Loading Facilities at Bulk Terminals*, Version 3 – Replace current version in the Jefferson County SIP; and
8. Regulation 7.59 *Standard of Performance for New Miscellaneous Metal Parts and Products Surface Coating Operations,* Version 7 - Replace current version in the Jefferson County SIP.

If you have any questions or comments concerning this matter, please contact Ms. Kelly Lewis, Program Planning Branch Manager, Division for Air Quality, at (502) 782-6687 or kelly.lewis@ky.gov.

Sincerely,

Charles G. Snavely
Secretary

c: Beverly Banister, Region 4 US EPA
Scott Davis, Region 4 US EPA
Lynorae Benjamin, Region 4 US EPA
Keith Talley, LMAPCD
Enclosures

AIR POLLUTION CONTROL DISTRICT
LOUISVILLE, KENTUCKY

GREG FISCHER
MAYOR

KEITH H. TALLEY, SR.
DIRECTOR

August 2, 2019

Ms. Melissa Duff, Director
Division for Air Quality
300 Sower Blvd, 2nd Floor
Frankfort, KY 40601

Dear Ms. Duff:

The Louisville Metro Air Pollution Control District (District) requests that the attached material be submitted to the U.S. Environmental Protection Agency (EPA) as revisions to the Jefferson County portion of the Kentucky State Implementation Plan (SIP). Electronic versions of all documents enclosed, including this letter, have been uploaded through SPeCS for SIPs.

This package contains eight (8) SIP requests. The District requests that the Commonwealth request the following:

1. Regulation 1.02 Definitions, Version 15 – Replace current version in the Jefferson County SIP;
2. Regulation 1.04 Performance Tests, Version 7 – Replace current version in the Jefferson County SIP;
3. Regulation 6.13 Standard of Performance for Existing Storage Vessels for Volatile Organic Compounds, Version 8 – Replace current version in the Jefferson County SIP;
4. Regulation 7.12 Standard of Performance for New Storage Vessels for Volatile Organic Compounds, Version 8 – Replace current version in the Jefferson County SIP;
5. Regulation 6.21 Standard of Performance for Existing Gasoline Loading Facilities at Bulk Terminals, Version 3 – Replace current version in the Jefferson County SIP;
6. Regulation 7.20 Standard of Performance for New Gasoline Loading Facilities at Bulk Terminals, Version 3 – Replace current version in the Jefferson County SIP;
7. Regulation 6.31 Standard of Performance for Existing Miscellaneous Metal Parts and Products Surface Coating Operations, Version 7 – Replace current version in the Jefferson County SIP; and
8. Regulation 7.59 Standard of Performance for New Miscellaneous Metal Parts and Products Surface Coating Operations, Version 7 – Replace current version in the Jefferson County SIP;

Your prompt consideration of this request is appreciated. If you have any questions or comments, please contact Byron L. Gary at (502) 574-7253.

Sincerely,

Keith Talley, Sr.
Director

Attachments

AIR POLLUTION CONTROL DISTRICT

CHECKLIST FOR SIP SUBMITTALS

Administrative Materials[1]

a) Letter[2] ☒
b) *Adoption* - Signed Board Minutes adopting regulation ☒
c) Legal Authority ☒ (see heading of each regulation)
d) *Actual Regulation or document, including changes made*
   i. Copy of Regulation or Plan ☒
   ii. Redline/Strikethrough (if reg change) ☒
e) *Commonwealth/Local procedural requirements*
   i. Committee Notice (x2) ☒
   ii. Committee Minutes (x2) ☒
   iii. Affidavit of 7-21 day public notice ☒
f) Affidavit of 30 day public notice ☒
g) Signed Public Hearing Minutes ☒
h) Comment & Response document ☒

Technical Support[3]

a) Pollutant Identification ☒
b) Area Identification ☒
c) Quantification of changes ☒
d) 110(l) Demonstration ☒
e) Modeling (if needed) ☐ (N/A)
f) Evidence limitations are based on continuous emission reduction technology (if necessary) ☒
g) Evidence plan contains emission limitations, work practice standards and recordkeeping/reporting requirements (if necessary) ☒
h) Compliance/enforcement strategies ☒
i) Special economic and technological justifications (if required) ☒
j) Regulatory Impact Assessment[4] ☒

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[1] 40 CFR Part 51, Appendix V, 2.1

[2] Letter from Commonwealth is technically required. Letter to DAQ may be used to fulfill some administrative requirements.

[3] 40 CFR Part 51, Appendix V, 2.2

[4] RIA is not specifically required by App. V. For routine regulation updates (e.g., IBRs), required technical support may be included in the RIA.

REQUEST FOR EPA ACTION

The Air Pollution Control District of Jefferson County (District) requests a revision to the Jefferson County portion of the Kentucky State Implementation Plan (SIP)**:**

1. Regulation 1.02 Definitions, Version 15 – Replace current version in the Jefferson County SIP;
2. Regulation 1.04 Performance Tests, Version 7 – Replace current version in the Jefferson County SIP;
3. Regulation 6.13 Standard of Performance for Existing Storage Vessels for Volatile Organic Compounds, Version 8 – Replace current version in the Jefferson County SIP;
4. Regulation 7.12 Standard of Performance for New Storage Vessels for Volatile Organic Compounds, Version 8 – Replace current version in the Jefferson County SIP;
5. Regulation 6.21 Standard of Performance for Existing Gasoline Loading Facilities at Bulk Terminals, Version 3 – Replace current version in the Jefferson County SIP;
6. Regulation 7.20 Standard of Performance for New Gasoline Loading Facilities at Bulk Terminals, Version 3 – Replace current version in the Jefferson County SIP;
7. Regulation 6.31 Standard of Performance for Existing Miscellaneous Metal Parts and Products Surface Coating Operations, Version 7 – Replace current version in the Jefferson County SIP; and
8. Regulation 7.59 Standard of Performance for New Miscellaneous Metal Parts and Products Surface Coating Operations, Version 7 – Replace current version in the Jefferson County SIP;

Pollutant/Area Identification

Pollutant: All
Affected Area: Jefferson County, Kentucky
Location: Louisville MSA

Area Designation: SO_2 (2010 Standard) – Partial Nonattainment
Ozone (2015 Standard) - Nonattainment

Resulting Emissions Changes:
None

NOTE:
Changes are primarily administrative in nature. See Regulatory Impact Assessments (RIAs) for more detail on changes, and quantification of changes.

Regulations 1.15v , and 7.02v18 are being included as courtesy, as they were adopted by the Louisville Metro Air Pollution Control Board at the same time as the rest of the regulations in this package; however, the District is not requesting that these Regulations be adopted into the Jefferson County portion of the Kentucky SIP.

AIR POLLUTION CONTROL DISTRICT
LOUISVILLE, KENTUCKY

GREG FISCHER
MAYOR

KEITH H. TALLEY, SR.
DIRECTOR

Louisville Metro Air Pollution Control Board
Notice of Strategy Committee Meeting

The Strategy Committee of the Louisville Metro Air Pollution Control Board will meet at 9:30 a.m. on **Wednesday, April 17, 2019** in Conference Room A of the Louisville Metro Air Pollution Control District, at the Edison Center, 701 West Ormsby Avenue, Louisville, Kentucky 40203.

The Strategy Committee invites the public to attend.

Strategy Committee Meeting Agenda

1. Call to Order – Recognition of Quorum

2. Draft amendment to Regulation 7.02 *Adoption of Federal New Source Performance Standards*, Version 18, Draft 1.

3. Draft amendment to Regulations 6.13 *Standard of Performance for Existing Storage Vessels for Volatile Organic Compounds*, Version 8, Draft 1; and
   7.12 *Standard of Performance for New Storage Vessels for Volatile Organic Compounds*, Version 8, Draft 1.

4. Draft amendment to Regulations 6.21 *Standard of Performance for Existing Gasoline Loading Facilities at Bulk Terminals*, Version 2, Draft 1; and
   7.20 *Standard of Performance for New Gasoline Loading Facilities at Bulk Terminals*, Version 3, Draft 1.

5. Draft amendment to Regulations 6.31 *Standard of Performance for Existing Miscellaneous Metal Parts and Products Surface Coating Operations*, Version 7, Draft 1; and
   7.59 *Standard of Performance for New Miscellaneous Metal Parts and Products Surface Coating Operations*, Version 7, Draft 1.

6. Adjourn

Minutes
Strategy Committee Meeting
of the
Louisville Metro Air Pollution Control Board

April 17, 2019

A meeting of the Strategy Committee of the Louisville Metro Air Pollution Control Board was called to order on April 17, 2019**,** at 9:30 a.m. in Suite 303 at 701 W. Ormsby Avenue., Louisville, Kentucky, by the acting Committee Chair, Dr. Geoffrey Cobourn. Committee member, Abbie Gilbert, was also present. A quorum was present.

Board member, Bill Jacob also attended. The following Louisville Metro Air Pollution Control District staff members were present: Rachael Hamilton, Byron Gary, and Cherri Steiner. Assistant County Attorney Stacy Fritze Dott was also present.

The following guests were present: Aaron Benson, Ford LAP; Steve Myers, Ford Motor Company; Gregory Dutton, Frost, Brown Todd; and Daniel Hardin, Smith Management Group.

1. **Draft amendments to Regulation 7.02** *Adoption of Federal New Source Performance Standards*, Version 18, Draft 1

   Mr. Gary stated that the change to Regulation 7.02 allows for the adoption of 40 CFR subpart CF Emissions Guidelines for Municipal Solid Waste Landfills and deletes Subpart HHHH.

2. **Draft amendments to Regulation 6.13** *Standard of Performance for Existing Storage Vessels for Volatile Organic Compounds*, Version 8, Draft 1; and **Regulation 7.12** *Standard of Performance for New Storage Vessels for Volatile Organic Compounds*, Version 8, Draft 1

   Mr. Gary stated that the amendments to Regulation 6.13 and 7.12 allow for more consistency, ease of reference, and address a conflict between the applicability in Section 1 and monitoring requirements in Section 5 regarding storage capacity.

3. **Draft amendments to Regulation 6.21** *Standard of Performance for Existing Gasoline Loading Facilities at Bulk Terminals*, Version 3, Draft 1; and **Regulation 7.20** *Standard of Performance for New Gasoline Loading Facilities at Bulk Terminals*, Version 3, Draft 1

   Mr. Gary stated that the amendments to Regulation 6.21 and Regulation 7.20 would eliminate the requirement for tanker trucks loading at bulk terminals to possess a valid Kentucky pressure-vacuum test sticker, and instead replaces it with specific vapor tightness and recordkeeping requirements.

4. **Draft amendments to Regulation 6.31** *Standard of Performance for Existing Gasoline Miscellaneous Metal Parts and Products Surface Coating Operations*, Version 7, Draft 1*;* and **Regulation 7.59** *Standard of Performance for New Miscellaneous Metal Parts and Products Surface Coating Operations*, Version 7, Draft 1

   Mr. Gary stated that the amendments to Regulation 6.31 and Regulation 7.59 clarify the exemption applicability for surface coating operations.

The District recommended that the amendments to Regulations 6.13, 6.21, 6.31,7.02, 7.12, 7.20, and 7.59 be released for a 30-day public comment period.

Motion: Dr. Geoffrey Cobourn moved that the District's proposed amendments to Regulations 6.13, 6.21, 6.31, 7.02, 7.12, 7.20, and 7.59 be released for a 30-day public comment period.

Ms. Abbie Gilbert seconded the motion. The motion passed unanimously.

Adjourn

The meeting was adjourned at 9:49 a.m.

_____ _____

Dr. Geoffrey Cobourn
Acting Chair

Rachael Hamilton
Secretary-Treasurer

Louisville Metro Air Pollution Control Board
Notice of Policy Committee Meeting

The Policy Committee of the Louisville Metro Air Pollution Control Board will meet at 11:00 a.m. on **Wednesday, April 17, 2019** in Conference Room A of the Louisville Metro Air Pollution Control District, at the Edison Center, 701 West Ormsby Avenue, Louisville, Kentucky 40203.

The Policy Committee invites the public to attend.

Policy Committee Meeting Agenda

1. Call to Order – Recognition of Quorum
2. Draft amendment to Regulation 1.02 *Definitions*, Version 15, Draft 1
3. Draft amendment to Regulation 1.04 *Performance Tests*, Version 7, Draft 1
4. Draft amendment to Regulation 1.15 *Version of Federal Regulations Incorporated by Reference*, Version 20, Draft 1
5. Adjourn

Minutes
Policy Committee Meeting
of the
Louisville Metro Air Pollution Control Board

April 17, 2019

A meeting of the Policy Committee of the Louisville Metro Air Pollution Control Board was called to order on April 17, 2019, at 11:00 a.m. in Suite 303 at 701 W. Ormsby Avenue., Louisville, Kentucky, by the acting Committee Chair, Steve Sullivan. Committee members, Bill Jacob and Dr. Josephine Mei, were also present. A quorum was present.

The following Louisville Metro Air Pollution Control District staff members were present: Rachael Hamilton, Byron Gary, and Cherri Steiner. Assistant County Attorney Stacy Fritze Dott was also present.

The following guests were present: Gregory Dutton, Frost, Brown Todd; and Daniel Hardin, Smith Management Group.

1. **Draft amendments to Regulation 1.02** *Definitions*, Version 15, Draft 1

   Mr. Gary stated that the amendment to Regulation 1.02 changes the definition of Volatile Organic Compounds (VOCs) for compounds to incorporate by reference the exclusions for compounds determined by the EPA to be minimally reactive.

2. **Draft amendments to Regulation 1.04** *Performance Tests*, Version 7, Draft 1

   Mr. Gary stated that the amendment to Regulation 1.04 specifies requirements for valid performance testing by adding a new section that lays out the requirement for a Test Report and by clarifying the required timeline for notifications.

3. **Draft amendments to Regulation 1.15** *Version of Federal Regulations Adopted and Incorporated by Reference*, Version 20, Draft 1

   Mr. Gary stated that the amendment to Regulation 1.15 is an update to the federal regulation version date.

The District recommended that the proposed amendments to Regulations 1.02, 1.04 and 1.15 be released for a 30-day public comment period.

Motion: Bill Jacob moved that the District's proposed amendments to Regulation 1.02, 1.04 and 1.15 be released for at least a 30-day public comment period.

Dr. Josephine Mei seconded the motion. The motion passed unanimously.

Adjourn

The meeting was adjourned at 11:20 a.m.

Steve Sullivan
Acting Chair

Rachael Hamilton
Secretary-Treasurer

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RE: Order # 0003513045

Account #: LCJ-0000000315
Total Cost of the Ad: $926.04

I, of The Courier-Journal, a newspaper published and printed in the State of Kentucky, County of Jefferson, and having general circulation in the County of Jefferson, who being duly sworn, deposeth and saith that the advertisement of which the annexed is a true copy and has been published in the said newspaper, once in each issue as follows:

04/19/19

Rachael Hamot
5/12/19

Shelly Hora

Subscribed and sworn to before me this 19th day of April, 2019

Kazoua Yang

Notary Public

11/9/22

Commission expires

KAZOUA YANG
NOTARY PUBLIC
STATE OF WISCONSIN

# of Affidavits: 1

Ad Number: 0003513045 04/19/19

Notice of Public Comment Period and Hearing

The Louisville Metro Air Pollution Control Board opens a public comment period April 19, 2019, on proposed amendments to Regulations 1.02 Definitions, Version 15; 1.04 Performance Tests, Version 7; 1.15 Version of Federal Regulations Incorporated by Reference, Version 20; 6.13 Standard of Performance for Existing Storage Vessels for Volatile Organic Compounds, Version 8; 7.12 Standard of Performance for New Storage Vessels for Volatile Organic Compounds, Version 8; 6.21 Standard of Performance for Existing Gasoline Loading Facilities at Bulk Terminals, Version 3; 7.20 Standard of Performance for New Gasoline Loading Facilities at Bulk Terminals, Version 3; 6.31 Standard of Performance for Existing Miscellaneous Metal Parts and Products Surface Coating Operations, Version 7; 7.59 Standard of Performance for New Miscellaneous Metal Parts and Products Surface Coating Operations, Version 7; 7.02 Adoption of Federal New Source Performance Standards, Version 18 ; that were proposed on April 17, 2019. If adopted by the Board, the amendments to Regulations 1.02, 1.04, 6.13, 6.21, 6.31, 7.12, 7.20, and 7.59 will be submitted to US EPA for inclusion in the Kentucky State Implementation Plan.

Written statements will be accepted by the Board Secretary-Treasurer, Rachael Hamilton, Louisville Metro Air Pollution Control District, 701 W. Ormsby Ave., Suite 303, Louisville, Ky 40203, until 5:00 p.m., May 24, 2019. Written statements will also be accepted electronically until the same deadline via the Internet at the e-mail address "airregs@louisvilleky.gov". Oral statements will be accepted at a public hearing in the Board Room of the Air Pollution Control District, 701 W. Ormsby Ave., Louisville at 10:00 a.m., June 19, 2019.

A paper copy of the proposed amendments may be obtained from Cherri Steiner, (502) 574-5606, between 8 a.m. and 5 p.m. Monday through Friday. An electronic copy of the proposed regulations may be downloaded from the District's website at www.louisvilleky.gov/APCD/Docket.

Minutes
Regular Meeting
of the
Louisville Metro Air Pollution Control Board

June 19, 2019

A regular meeting of the Louisville Metro Air Pollution Control Board was called to order on Wednesday, June 19, 2019, at 10:04 a.m. in the Edison Room, at 701 W. Ormsby Ave., Louisville, Kentucky, by the Chairman, Carl Hilton. Other Board members present were: Dr. Geoffrey Cobourn, Dr. Josephine Mei, Kandice Shobe-White, and Steve Sullivan. A quorum was present.

The following Louisville Metro Air Pollution Control District staff members were present: Keith Talley, Rachael Hamilton, Steven Gravatte, Billy DeWitt, Tom Nord, Matt King, Michelle King, Rick Williams, Byron Gary, Cherri Steiner, Shannon Hosey, Andrea Cooley, Kevin Klesta, Tom Lobb, Craig Butler, Ulalo Chirwa, Dee Lynch, Narathip Chitradon, and Andy Purdon. Assistant County Attorney Stacy Fritze Dott, Assistant County Attorney Susan Ely, and County Attorney staff member Tammy Brown were also present.

The following guests were present: Corinne Greenberg, Eckart America Corporation; Stewart McCollam, Smith Management Group; Mike DeBusschere, KEC; Steve Myers, Ford; Aaron Benson, Ford; Brandan Burfict, LG&E, Rebecca Cash, LG&E; and Kelly Bartley, BGD.

Approval of Minutes

The minutes of the regular Board meeting held on May 15, 2019, were approved with one correction. Under the Committee Reports section, the words "for a 30-day comment period" were added to Mr. Sullivan's report on the April 17, 2019, Policy Committee Meeting.

New Business

1. Regulation 1.02 *Definitions*, Version 15
2. Regulation 1.04 *Performance Tests*, Version 7
3. Regulation 1.15 *Version of Federal Regulations Incorporated by Reference*, Version 20
4. Regulation 6.13 *Standard of Performance for Existing Storage Vessels for Volatile Organic Compounds*, Version 8
5. Regulation 7.12 *Standard of Performance for New Storage Vessels for Volatile Organic Compounds*, Version 8
6. Regulation 6.21 *Standard of Performance for Existing Gasoline Loading Facilities at Bulk Terminals*, Version 3
7. Regulation 7.20 *Standard of Performance for New Gasoline Loading Facilities at Bulk Terminals*, Version 3
8. Regulation 6.31 *Standard of Performance for Existing Miscellaneous Metal Parts and Products Surface Coating Operations*, Version 7
9. Regulation 7.59 *Standard of Performance for New Miscellaneous Metal Parts and Products Surface Coating Operations*, Version 7
10. Regulation 7.02 *Adoption of Federal New Source Performance Standards*, Version 18

Mr. Byron Gary, Regulatory Coordinator, recommended that the Board adopt the amended regulations as proposed by the District.

Motion: Mr. Sullivan moved to adopt the amended regulations as proposed by the District.

The motion was seconded and approved unanimously.

Staff Reports

A. Director

Ms. Rachael Hamilton, Assistant Director, gave an update on the Air Quality Trust Fund.

Mr. Keith Talley, Director, updated the Board on the following District activities:

IT Initiatives

- Accela, the new Metro-wide data/information system, went live today, June 19, 2019. Mr. Talley commended Mr. Bryan Frazar, Technology Project Coordinator, on his tireless work on the Accela project for the District and Louisville Metro Government.

- OnBase, the new document management system, is scheduled to go live on July 1, 2019.

- The State and Local Emission Inventory System (SLEIS), is ready for testing and is planned to be used for reporting 2019 data in 2020.

- The new updated version of Air Watch went live on May 1, 2019. The District looks forward to getting all of its functionality up and running soon.

Air Toxics Monitoring

The District continues to work with the auto gas chromatograph (auto GC) vendor to maximize the performance and data confidence. The District expects to have the auto GC back soon from a second round of updates and enhancements.

Photochemical Assessment Monitoring Station (PAMS)

Despite the proposed two-year delay by U.S. EPA on deploying the Photochemical Assessment Monitoring System (PAMS), which was originally scheduled for July 2019 at the District's Cannons Lane Air Monitoring Station (CLAMS), the District is moving forward with its purchase, installation and implementation of a second auto GC monitoring system to be installed at CLAMS for monitoring certain photochemically-reactive volatile organic compounds (VOCs). The collected data will support both the District's ozone and air toxic monitoring work.

Multi-Pollutant Emissions Control Strategy

The District is beginning work with U.S. EPA on a multi-pollutant project that may lead to control strategies that can achieve significant health, environmental, and economic benefits.

EPA Research Projects

- While U.S. EPA's research on the original RARE project focusing on Next Generation Emission Monitoring (NGEMS) is scheduled to wrap up soon, the District and U.S. EPA researchers hope for additional funds in order to continue collaborating in some form or fashion. In the meantime, other collaborative research efforts with U.S. EPA, including work on an odor wheel and app, and a volatile organic compound tracking system for odors, will continue.

Ozone

Work to address the District's ozone non-attainment status has ramped up progressively with research, data collection and analysis underway, while stakeholder work groups will be established later this fall. To date:

- The ozone study being conducted by Ramboll is officially underway and on schedule.

- A comprehensive VOC emissions inventory will be compiled and will include a subsequent analysis to determine whether the Louisville Metropolitan Statistical Area (MSA) is nitrogen oxides (NOx) or VOC limited, meaning which ozone precursor, NOx or VOC's, plays the biggest role in the formation of ozone in our area. Knowing to what degree the area is either NOx or VOC limited will be valuable information in understanding ozone formation in Louisville and attaining the 2015 ozone standard.

- Additionally, if warranted by the initial findings in the study, a VOC reactivity study specific to Louisville Metro may be conducted to determine which VOC's contribute most to the formation of ozone.

Enforcement

In the last six months, the District hired a second part-time county attorney to concentrate on our enforcement efforts, specifically, to provide additional support for community compliance activities covering dust, open burning, odor, and asbestos. Mr. Talley commended the District's Community Compliance staff for their hard work and the joint efforts with the County Attorneys to build strong legal cases. He reported already seeing visible benefits from the additional legal help.

Collaborations

The District is planning and scheduling meetings to collaborate with Metro Government peer agencies, including Louisville Metro Public Health and Wellness and the Office of Resiliency, and external groups, including the University of Louisville's (UofL) Envirome Institute in support of the District's mission.

Core Work

Notwithstanding the areas previously mentioned, Mr. Talley reminded the Board that the District's core, day-to-day work continues:

- Industrial and Asbestos permits still must be issued;
- Industrial compliance site visits and report analysis must still be conducted;
- Community compliance complaints for dust, odor, and open burns must be investigated;
- Criteria pollutant air monitoring continues; and
- Community outreach and programs such as KAIRE, Grow More Mow Less, Lawn Care for Cleaner Air, and our workshop series continue to grow.

Mr. Talley stated that all of the above efforts are only possible because of the District's outstanding staff who exemplify the adage of "getting more done with less." The District's senior leadership, which has over 83 years of combined regulatory experience and its supervisors with over 62 years of combined regulatory experience, provide great direction and guidance. Mr. Talley stated that, despite beginning at the District with no air experience, he has successfully placed good, experienced people in the right positions, including non-managerial staff who perform 80% - 90% of the daily work of this agency. Mr. Talley added that maintaining a great team includes asking questions, listening, overcoming disagreements, and learning from mistakes so that management can make good, well-vetted, and thoughtful decisions. He continued by stating two guiding principles for his decision-making:

1. Prioritize and make decisions based on what will make the air cleaner tomorrow than it is today; and

2. Understand that the District must take into account the fact that Louisville, like so many other areas across the country, has equity issues that must be addressed to the best of the District's ability.

Chairman Hilton expressed thanks to Mr. Talley for the update and stated that the public has often complimented the District on its professionalism, especially those conducting site inspections.

Additional Updates

Mr. Talley recently appeared on the radio show "In Conversation" at radio station WFPL. Accompanying him on the show were Ms. Sarah Lynn Cunningham and Michelle Roberts, a nationally-based environmental justice advocate who has worked with Eboni Cochran regarding Rubbertown.

On May 20, 2019, the District held a Clearing the Air workshop titled Air Quality and Greenhouse Gases. The June 20, 2019, workshop topic will be APCD Website Resources / Finding and Interpreting Air Quality Data. The July 17, 2019, workshop topic will be Odors and Emergency Response.

Mr. Talley and Ms. Michelle King, Executive Administrator and Director of Program Planning, recently attend the Metro 4 conference in Atlanta. The conference yielded great information, interaction and pertinent updates to the work of the District.

Mr. Talley, Ms. Hamilton, and Tom Nord, Communications Specialist, recently met with Metro Councilwoman Nicole George and her administrative staff. The District always appreciates the opportunity to meet with Council members and talk about its work. Because Councilwoman George was

very receptive and interested in our work, the District has scheduled a second meeting to tour the Cannons Lane air monitoring site.

On June 17, 2019, Mr. Talley and Ms. King attended *City on Science*, a relatively new outreach program initiated by UofL's Envirome Institute. Its goal is to generate community conversation on various topics of interest or being researched at the University. The discussion included a paper published by UofL, entitled "Residential Greenness and Cardiovascular Disease Risk." Early findings indicated a positive effect on health with increase greening of the home environment; however, there is additional work to be done including addressing policies, programs, and equity in order to improve public health.

Ms. Hamilton recently attended the Rubbertown Community Action Advisory Council meeting and gave an update on the STAR program, criteria pollutants, and odors. Ms. Hamilton added that with the rollout of Metro311, the public will be able to utilize that app to submit complaints, not only for air pollution issues, but for all of Metro's various business functions. The District will continue to accept complaints via phone and email, the Smell My City app, and now the enhanced MetroCall311, including the new app.

Mr. Billy DeWitt presented updates on air monitoring NAAQS.

A. Air Quality Report

The air quality monitoring report was submitted for filing. A copy is attached to the original minutes.

B. Enforcement Status Report

The enforcement status report was submitted for filing. A copy is attached to the original minutes.

C. Excess Emission Event Report

The excess emission event report was submitted for filing. A copy is attached to the original minutes.

D. Complaint Investigation Status Report

The complaint investigation status report was submitted for filing. A copy is attached to the original minutes.

Next Meeting

The next regular Board meeting is scheduled for Wednesday, July 17, 2019, at 10:00 a.m.

Adjourn

The meeting was adjourned at 10:51 a.m.

Carl E. Hilton
Chairman

Rachael Hamilton
Secretary-Treasurer

Minutes
Public Hearing Meeting
of the
Louisville Metro Air Pollution Control Board

June 19, 2019

A public hearing of the Louisville Metro Air Pollution Control Board was called to order on June 19, 2019, at 10:00 a.m. in the Edison Room, at 701 W. Ormsby Ave., Louisville, Kentucky, by the Chairman, Carl Hilton. Other Board members present were: Dr. Geoffrey Cobourn, Dr. Josephine Mei, Kandice Shobe-White, and Steve Sullivan. A quorum was present.

General Statement, Rules and Purpose

The Chairman read the opening announcements, rules and purpose of the public hearing, which was to review the following matters:

1. Regulation 1.02 *Definitions*, Version 15

Mr. Byron Gary, Regulatory Coordinator, asked the Board to consider and adopt an amendment to Regulation 1.02 to revise the definition of Volatile Organic Compounds by incorporating by reference the federal definition found at 40 CFR §51.100(s)(1).

2. Regulation 1.04 *Performance Tests*, Version 7

Mr. Byron Gary asked the Board to consider and adopt an amendment to Regulation 1.04 to revise the regulation to specify requirements for valid performance testing by adding a new section that specifies the requirements for a Test Report and clarifies the required timeline for notifications.

3. Regulation 1.15 *Version of Federal Regulations Incorporated by Reference*, Version 20

Mr. Gary asked the Board to consider and adopt an amendment to Regulation 1.15 to update the date of the version of Code of Federal Regulations (CFR) incorporated by reference.

4. Regulation 6.13 *Standard of Performance for Existing Storage Vessels for Volatile Organic Compounds*, Version 8

Mr. Gary asked the Board to consider and adopt an amendment to Regulation 6.13 to update the threshold for monitoring requirements to match the lower limit in the applicability.

5. Regulation 7.12 *Standard of Performance for New Storage Vessels for Volatile Organic Compounds*, Version 8

Mr. Gary asked the Board to consider and adopt an amendment to Regulation 7.12 to update the threshold for monitoring requirements to match the lower limit in the applicability section of the regulation.

6. **Regulation 6.21** ***Standard of Performance for Existing Gasoline Loading Facilities at Bulk Terminals*****, Version 3**

Mr. Gary asked the Board to consider and adopt an amendment to Regulation 6.21 to remove the requirement for tanker trucks loading at bulk terminals to possess a valid Kentucky pressure-vacuum test sticker, and instead require specific vapor tightness and recordkeeping requirements.

7. **Regulation 7.20** ***Standard of Performance for New Gasoline Loading Facilities at Bulk Terminals*****, Version 3**

Mr. Gary asked the Board to consider and adopt an amendment to Regulation 7.20 to remove the requirement for tanker trucks loading at bulk terminals to possess a valid Kentucky pressure-vacuum test sticker, and instead require specific vapor tightness and recordkeeping requirements.

8. **Regulation 6.31** ***Standard of Performance for Existing Miscellaneous Metal Parts and Products Surface Coating Operations*****, Version 7**

Mr. Gary asked the Board to consider and adopt an amendment to Regulation 6.31 to clarify that the exemption applies only to the emissions standards and not the recordkeeping requirements.

9. **Regulation 7.59** ***Standard of Performance for New Miscellaneous Metal Parts and Products Surface Coating Operations*****, Version 7**

Mr. Gary asked the Board to consider and adopt an amendment to Regulation 7.59 to clarify that the exemption only applies to the emissions standards and not the recordkeeping requirements.

10. **Regulation 7.02** ***Adoption of Federal New Source Performance Standards*****, Version 18**

Mr. Gary asked the Board to consider and adopt an amendment to Regulation 7.02 to add the NSPS for Municipal Solid Waste Landfills.

Statements

There were no public statements.

Adjourn

The meeting was adjourned at 10:04 a.m.

Carl E. Hilton
Chairman

Rachael Hamilton
Secretary-Treasurer

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I, of The Courier-Journal, a newspaper published and printed in the State of Kentucky, County of Jefferson, and having general circulation in the County of Jefferson, who being duly sworn, deposeth and saith that the advertisement of which the annexed is a true copy and has been published in the said newspaper, once in each issue as follows:

Jackael Armett
July 8, 2019

06/12/19

.....

Subscribed and sworn to before me this 12th day of June, 2019

Notary Public

11/9/22
Commission expires

KAZOUA YANG
NOTARY PUBLIC
STATE OF WISCONSIN

# of Affidavits: 1

Notice of Public Hearing

The Louisville Metro Air Pollution Control Board will accept oral statements at a public hearing on June 19, 2019 at 10:00 a.m. in the Edison Room at the Air Pollution Control District, 701 W. Ormsby Ave., Louisville, Ky 40203, on amendments to District Regulations 1.02 Definitions, Version 15; 1.04 Performance Tests, Version 7; 1.15 Version of Federal Regulations Incorporated by Reference, Version 20; 6.13 Standard of Performance for Existing Storage Vessels for Volatile Organic Compounds, Version 8; 7.12 Standard of Performance for New Storage Vesselsfor Volatile Organic Compounds, Version 8; 6.21 Standard of Performance for Existing Gasoline Loading Facilities at Bulk Terminals, Version 3; 7.20 Standard of Performance for New Gasoline Loading Facilities at Bulk Terminals, Version 3; 6.31 Standard of Performance for Existing Miscellaneous Metal Parts and Products Surface Coating Operations, Version 7; 7.59 Standard of Performance for New Miscellaneous Metal Parts and Products Surface Coating Operations, Version 7; 7.02 Adoption of Federal New Source Performance Standards, Version 18, which were proposed on April 17, 2019. If adopted by the Board, the amendments to Regulations 1.02, 1.04, 6.13, 6.21, 6.31, 7.12, 7.20, and 7.59 will be submitted to EPA for inclusion in the Kentucky State ImpleA paper copy of the proposed regulations may be obtained from Cherri Steiner, (502) 574-5606, between 8 a.m. and 5 p.m. Monday through Friday. An electronic copy of the proposed regulations may be downloaded from the District's website at "www.louisvilleky.gov/APCD/Docket.htm".

LOUISVILLE METRO AIR POLLUTION CONTROL DISTRICT

RESPONSE TO COMMENTS
REGULATION 1.02 *DEFINITIONS*, VERSION 15;
REGULATION 1.04 *PERFORMANCE TESTS*, VERSION 7;
REGULATION 1.15 *VERSION OF FEDERAL REGULATIONS INCORPORATED BY REFERENCE*, VERSION 20;
REGULATION 6.13 *STANDARD OF PERFORMANCE FOR EXISTING STORAGE VESSELS FOR VOLATILE ORGANIC COMPOUNDS*, VERSION 8;
REGULATION 7.12 *STANDARD OF PERFORMANCE FOR NEW STORAGE VESSELS FOR VOLATILE ORGANIC COMPOUNDS*, VERSION 8;
REGULATION 6.21 *STANDARD OF PERFORMANCE FOR EXISTING GASOLINE LOADING FACILITIES AT BULK TERMINALS*, VERSION 3;
REGULATION 7.20 *STANDARD OF PERFORMANCE FOR NEW GASOLINE LOADING FACILITIES AT BULK TERMINALS*, VERSION 3;
REGULATION 6.31 *STANDARD OF PERFORMANCE FOR EXISTING MISCELLANEOUS METAL PARTS AND PRODUCTS SURFACE COATING OPERATIONS*, VERSION 7;
REGULATION 7.59 *STANDARD OF PERFORMANCE FOR NEW MISCELLANEOUS METAL PARTS AND PRODUCTS SURFACE COATING OPERATIONS*, VERSION 7; AND
REGULATION 7.02 *ADOPTION OF FEDERAL NEW SOURCE PERFORMANCE STANDARDS*, VERSION 18
PROPOSED APRIL 17, 2019

Public Comment Period The following comments were received during the public comment period.

Comment: ***Regulation 7.02*** Adoption and Incorporation by Reference of Federal New Source Performance Standards

The Division Recommends the District adopt 40 CRT Part 60 Subparts Ga, BBa, XXX, OOOOa, and TTTT. This is necessary in order to take delegation of implementation and enforcement authority for those specific provisions.

- *Melissa K. Duff, Director, Kentucky Division for Air Quality*

Response: The District agrees these provisions should be adopted as well. However, because public comment was not taken on adoption of these standards this will have to be done in a future action. The District also would like to state that it currently has no sources covered by the listed provisions.

Comment: ***Key Comment***

1. *Further explanation of the changes to the monitoring requirements in Regulations 6.13 and 7.12 is needed through a non-interference demonstration, pursuant to Section 110(l) of the Clean Air Act. In order to justify the changes, the Louisville Metro Air Pollution Control District (District) should provide further information regarding the rationale for the proposed changes, as well as an analysis of the potential impact on attainment or maintenance of the National Ambient Air Quality Standards and reasonable further progress. For example, please consider providing more detail regarding the facilities subject to Regulation 6.13 and Regulation 7.12, including the approximate number of facilities currently subject to each regulation. It may also be helpful to explain any new technologies that will prevent any new facilities from becoming subject to Regulation 7.12.*

- *Lynorae Benjamin, Acting Chief, Air Planning and Implementation Branch, U.S. EPA Region 4*

Response: Regarding the specific information requested, the District is unable to provide an exact number of facilities subject to the regulations, but notes that it would be a large number of facilities. See updated information in the final Regulatory Impact Assessment (RIA) accompanying this action. However, as explained in the Preliminary Regulatory Impact Assessment (PRIA), the specific monitoring provision being amended currently affects no facilities.

The District also cannot explain how new technologies might prevent new facilities from becoming subject to Regulation 7.12. Indeed, the Regulation by its own terms applies to any new storage vessel with greater than 250 gallons capacity storing VOCs with greater than 78 mm Hg (1.5 psia). The specific provisions being amended, however, (section 5.1 of both Regulation 6.13 and 7.12), is unlikely to cover any new facilities. The PRIA explains that the requirements currently only cover external floating roof tanks with greater than 40,000 gallons capacity and without secondary seals, and "section 3.4 of these regulations explicitly requires secondary seals for nearly all storage tanks with capacity of greater than 40,000 gallons, there are nearly no types of tanks which could fall under the monitoring requirements of section 5.1. The sole exception would be welded tanks with a capacity of greater than 40,000 gallons, and a true vapor pressure of less than 27.6 kPa (4.0 psia) and certain types of primary seals."

Comment: ***General Comments***

2. *The EPA requests that the District clarify which of these rule revisions are being submitted for approval into the State Implementation Plan. Specifically, the EPA requests clarification regarding Regulations 1.15 and 7.02, which are not currently part of the State Implementation Plan but changes to which are included as part of the prehearing package.*

- *Lynorae Benjamin, Acting Chief, Air Planning and Implementation Branch, U.S. EPA Region 4*

Response: The District does not intend to submit Regulations 1.15 and 7.02 for inclusion in the SIP. Copies were included in the prehearing package solely for courtesy purposes. The District apologizes for not clearly stating this in the prehearing letter sent to U.S. EPA. As stated in the concurrently published public notice, "[i]f adopted by the Board, the amendments to Regulations 1.02, 1.04, 6.13, 6.21, 6.31, 7.12, 7.20, and 7.59 will be submitted to US EPA for inclusion in the Kentucky State Implementation Plan."

Comment: ***Comment for Proposed Amendments to District Regulation 1.02:***

The proposed amendment to adopt and incorporate by reference the definition of **"Volatile Organic Compounds" (VOC)** *from 40 CFR §51.100(s) - §51.100(s)(1) in Louisville Metro Air Pollution Control District (District) Regulation 1.02 is welcome. Aligning the District's definition of VOC to that promulgated by EPA in the Code of*

Federal Regulations simplifies District regulations, meets EPA requirements for delegated administration of Federal Regulations (e.g., Standards of Performance for New Stationary Sources and National Emissions Standards for Hazardous Air Pollutants Programs), and removes ambiguities that arise when multiple definitions of the same term (i.e., VOC) exist within multiple District Regulations.

To this end, the District should revise or remove Sections 2.3 – 2.3.1 of District Regulation 7.25 where **"Volatile organic compound" (VOC)** *is defined. The definition of* **"Volatile organic compound" (VOC)** *shown in Sections 2.3 – 2.3.1 of District Regulation 7.25 is not consistent with EPA's definition found at 40 CFR §51.100(s) - §51.100(s)(1) or the District's current definition in Sections 1.84 – 1.84.54 of District Regulation 1.02.*

The definition of **"Volatile organic compound" (VOC)** *regulated under District Regulation 7.25, as identified in EPA approved regulations listed in Table 2 of 40 CFR §52.920(c), should conform with the federal definition found at 40 CFR §51.100(s) - §51.100(s)(1). If the definition of* **"Volatile organic compound" (VOC)** *shown in Sections 2.3 – 2.3.1 of District Regulation 7.25 remains unchanged, emission reductions claimed for VOCs under District Regulation 7.25, used for nonattainment implementation purposes, might not be creditable for attainment demonstration purposes with the 2015 Ozone National Ambient Air Quality Standard.*

Therefore, removal of Sections 2.3 – 2.3.1 in District Regulation 7.25 or revising Sections 2.3 – 2.3.1 in District Regulation 7.25 to match the definition of **"Volatile Organic Compounds" (VOC)** *adopted and incorporate by reference from 40 CFR §51.100(s) - §51.100(s)(1) is appropriate and justified.*

The definition of **"Volatile organic compound" (VOC)** *in* ***ALL*** *District Regulations should be consistent with that promulgated by EPA found at 40 CFR §51.100(s) - §51.100(s)(1). Otherwise, the proposed revisions to Sections 1.84 – 1.84.1 of District Regulation 1.02 will not achieve the District's stated purpose, as promulgated in the April 17, 2019 Preliminary Regulatory Impact Assessment, to conform with federal regulations and maintain standards at least as stringent as the federal regulations.*

- *Stewart W. McCollam*

Response: The District is not currently taking comment on any changes to Regulations other than those listed in the public notice associated with this action. However, the District notes the commenter's concern and will take it under consideration for possible future action.

Comment: ***Comment for Proposed Amendments to District Regulations 6.31 and 7.59:***

The District's April 17, 2019 Preliminary Regulatory Impact Assessment stated the proposed amendments to District Regulations 6.31 and 7.59 is "to clarify the exemption is only as to the emissions standards in each reg, as section 6.5 of these respective regulations already explicitly contains recordkeeping requirements." The intent of the proposed amendments is well understood; however, ambiguity remains regarding applicability of Section 4 compliance requirements in both District Regulation 6.31 and 7.59.

Certain compliance requirements in Section 4 of District Regulation 6.31 and Section 4 of District Regulation 7.59 are only applicable to each regulation's VOC standards (i.e., Section 3 of District Regulation 6.31 or Section 3 of District Regulation 7.59). Therefore, a stationary source which maintains records, in accordance with Section 6.5 of District Regulation 6.31 or Section 6.5 of District Regulation 7.59, demonstrating that it meets the exemption requirements listed in Section 5 of District Regulation 6.31 or Section 5 of District Regulation 7.59 should not be subject to compliance requirements in Sections 4.2 – 4.4 of District Regulation 6.31 or Sections 4.3 – 4.5 of District Regulation 7.59.

To elucidate the logical conclusion that sources exempt from Section 3 VOC standards in District Regulation 6.31 or 7.59 are not subject to associated Section 4 compliance requirements for VOC standards in District Regulation 6.31 or 7.59, the District should revise Section 5 of District Regulations 6.31 and 7.59 to read as follows (RED TEXT shows suggested revisions):

District Regulation 6.31, Section 5.1:

"The surface coating of the following metal parts and products, or operations, are exempt from the standards in section 3 and the compliance requirements in Sections 4.2 - 4.4 of this regulation:"

District Regulation 6.31, Section 5.2:

"Any affected facility shall be exempt from Section 3 and Sections 4.2 - 4.4 of this regulation if the total VOC emissions from all affected facilities subject to this regulation are less than or equal to five tons per year (potential emissions prior to any add-on controls)."

District Regulation 7.59, Section 5.1:

"The surface coating of the following metal parts and products, or operations, are exempt from the standards in section 3 and the compliance requirements in Sections 4.3 - 4.5 of this regulation:"

District Regulation 6.31, Section 5.2:

"Any affected facility shall be exempt from Section 3 and Sections 4.3 - 4.5 of this regulation if the total VOC emissions from all affected facilities subject to this regulation are less than or equal to five tons per year (potential emissions prior to any add-on controls)."

The proposed revisions clearly state the non-applicability of Section 4 compliance requirements for any source which demonstrates it is exempt from the Section 3 VOC Standards in District Regulation 6.31 and 7.59, respectively. Moreover, the revisions do not exempt any affected facility from the requirements to comply with the regulation upon startup (Section 4.1 of District Regulation 7.59) or to comply with District approval requirements of pollution control systems (Section 4.1 of District Regulation 6.31 and Section 4.2 of District Regulation 7.59).*Stewart W. McCollam*

Response: The District appreciates the concern for clarity but believes that the Regulation is already sufficiently clear that exempt facilities are not subject to the compliance requirements for non-exempt facilities. For example, the Regulation 6.31 §4.2 (referenced in the commenter's suggested language for Regulation 6.31 §5.1) states "[c]ompliance with an emission limit in section 3.4 shall be demonstrated by …." A facility not subject to section 3.4 would also therefore not be subject to this section.

LOUISVILLE METRO AIR POLLUTION CONTROL DISTRICT
REGULATORY IMPACT ASSESSMENT

REGULATION 1.02, VERSION 14
Definitions

REGULATION 1.15 VERSION 20
Version of Federal Regulations Adopted and Incorporated by Reference

JUNE 19, 2019

Purpose of the Action:

This update to the regulations brings them into conformance with latest version of the Federal Regulations.

Scope of the Amendments:

The update to Regulation 1.02 includes new exclusions to the definition of Volatile Organic Compounds ("VOCs") for compounds determined by the EPA to be minimally reactive by incorporating exclusions by reference. In the past the District periodically updated the list to add individual exclusions. The District is changing to an incorporation by reference to more easily ensure the definition in Regulation 1.02 stays in conformity with the federal definition.

Annual versions of the federal regulations incorporated by reference in Regulations 1.15 are updated from July 1, 2017, to July 1, 2018. The change in Regulation 1.15 also affects Regulations 5.02 & 7.02, which refer to it. There are no major changes in the federal versions of the regulations incorporated by reference since 2017.[i]

Estimated Costs and Savings:

There are no estimated costs or savings associated with this rule.

Feasibility of All Alternatives:

The incorporation by reference update is required by Federal Regulation. The District has delegated authority to administer the Standards of Performance for New Stationary Sources[1], and National Emissions Standards for Hazardous Air Pollutants[2] Programs, and is required to maintain standards at least as stringent as the federal regulations.

Comparison with Any Minimum or Uniform Standards:

These amendments are being made to conform with federal regulations.

Report on Public Outreach Efforts:

Drafts of proposed Regulations were proposed for formal review on April 17, 2019, and sent to: to all members of the Louisville Metro Air Pollution Control Board, all persons who have requested to be notified of proposed changes to any District regulations; EPA Region 4; and the Kentucky Division for Air Quality.

The public had an opportunity to comment at a meeting of the appropriate committee of the Air Pollution Control Board, during the formal public comment period, and at a public hearing prior to consideration by the full Board.

[1] CAA §111(c), 40 CFR §60.04.

[2] CAA §112(l); 40 CFR §§61.04, 63.91, 63.99(a)(18); 61 FR 11738 ("the EPA is also promulgating approval under section 112(l)(5) and 40 CFR 63.91 of the District's program for receiving delegation of section 112 standards and programs that are unchanged from Federal rules as promulgated. In addition, EPA is approving the delegation of all existing standards and programs under 40 CFR parts 61 and 63. This program for delegation applies to both part 70 sources and non-part 70 sources."

[i] The following is a list of the revisions by EPA to 40 CFR Part 60 (Standards of Performance for New Stationary Sources, incorporated in part in Regulation 7.02) from July 1, 2017 to June 30, 2018:

60.4 (b)(A) through (EEE) redesignated as (b)(1) through (57); (b)(19), (35), and (44) revised	82 FR 32646
60.4 (b)(33) introductory text and (e)(1) revised	83 FR 15968
Regulation at 83 FR 15968 withdrawn	83 FR 25936
60.5397a (f)(1), (g)(1), (2), and (h)(2) revised	83 FR 10638
60 Appendix B amended	82 FR 36689
60 Appendix F amended	82 FR 37824, 44108

Not all of these revisions impact portions of the federal regulation incorporated by reference.

The following is a list of the revisions by EPA to 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants, incorporated in part in Regulation 5.02) from July 1, 2017 to June 30, 2018:

61 Policy statement	82 FR 52667
61.04 (b)(A) through (EEE) redesignated as (b)(1) through (57); (b)(19), (35) and (44) revised	82 FR 32646
(b)(33) introductory text and (c)(6)(iii) revised	83 FR 15968
Regulation at 83 FR 15968 withdrawn	83 FR 25936

Not all of these revisions impact portions of the federal regulation incorporated by reference.

The following federal register notices chronicle the revisions by EPA to 40 CFR Part 63 (National Emission Standards for Hazardous Air Pollutants For Source Categories, incorporated in part in Regulation 5.02) from July 1, 2017 to June 30, 2018:

63 Notification	83 FR 5543
63.14 (m)(3) revised	82 FR 47347
63.14 (l)(13) added	83 FR 9218
63.99 (a)(44)(i) revised	83 FR 1562
63.99 (a)(46) added	83 FR 9218
63.99 (a)(32)(i) revised	83FR 15969
Regulation at 83 FR 15969 withdrawn	83 FR 25936

63.600—63.611 (Subpart AA) Table 2 and Table 3 amended	82 FR 45199
63.600—63.611 (Subpart AA) Table 4 amended	82 FR 45200
63.600—63.611 (Subpart AA) (m)(5) through (23) redesignated as (m)(6) through (24); new (m)(5) added	82 FR 48178
63.605 (d)(1)(ii)(A) revised	82 FR 45199
63.608 (e) and (f) added	82 FR 45199
63.620—63.632 (Subpart BB) Table 3 amended	82 FR 45200
63.620—63.632 (Subpart BB) Table 4 amended	82 FR 45201
63.625 (d)(1)(ii)(A) revised	82 FR 45200
63.628 (e) and (f) added	82 FR 45200
63.860—63.868 (Subpart MM) Table 1 revised	82 FR 47353
63.860 (b)(5) and (7) revised; (d) added	82 FR 47347
63.861 Amended	82 FR 47347
63.862 (c)(1) and (d) revised	82 FR 47347
63.863 (a) and (c) revised	82 FR 47347
63.864 (d) introductory text, (4), (e)(10)(i), (ii), (12) introductory text, (i), (ix), (x), (13), (14), (g), (j), and (k) revised; (e)(1), (2), (10)(iii), (f), and (h) added	82 FR 47348
63.865 Introductory text, (b)(1) through (5), (c)(1), and (d) introductory text revised	82 FR 47350
63.866 (a) removed; (c) and (d) revised	82 FR 47351
63.867 (a)(2) removed; (a)(3) and (c) revised; (d) added	82 FR 47351
63.868 (b)(2), (3), and (4) revised	82 FR 47353
63.691 (c)(3) introductory text and (ii) revised	83 FR 3992
63.1349 (b)(6)(v)(H) added	82 FR 39673
63.1350 (l)(4) introductory text revised	82 FR 39673
63.1380—63.1399 (Subpart NNN) Table 2 amended	82 FR 34860, 60885
Regulation at 82 FR 34860 withdrawn	82 FR 49132
63.1381 Amended	82 FR 60883
63.1382 (c)(6), (8)(i), and (9) revised	82 FR 60884
63.1383 (g)(1), (h), (i)(1), and (j) revised	82 FR 60884
63.1384 (a) introductory text, (3), (9), and (c) introductory text revised	82 FR 60884
63.1385 (a)(8) revised	82 FR 60885
63.1386 (d)(2)(v) revised	82 FR 60885
63.1580—63.1595 (Subpart VVV) Revised	82 FR 49525
63.2130—63.2192 (Subpart CCCC) Revised	82 FR 48178
63 Appendix A amended	83 FR 12122

Not all of these revisions impact portions of the federal regulation incorporated by reference.

REGULATION 1.02 Definitions

Louisville Metro Air Pollution Control District
Jefferson County, Kentucky

Pursuant To: KRS Chapter 77 Air Pollution Control
Relates To: KRS Chapter 77 Air Pollution Control
Necessity and Function: KRS 77.180 authorizes the Air Pollution Control Board to adopt and enforce all orders, rules, and regulations necessary or proper to accomplish the purposes of KRS Chapter 77. This regulation contains definitions used throughout District regulations.

SECTION 1 Definitions
The following terms shall have the meaning given to them in this regulation except as otherwise specified in the District's regulations. All terms not defined in these regulations shall have the meaning given to them in KRS 77.005, the Clean Air Act, or by commonly accepted usage.

1.1 "Act" means the Clean Air Act, 42 USC 7401 et seq.

1.2 "Acute noncancer effect" means a biochemical change, functional impairment, or pathological lesion that is produced within a short period of time following an exposure and that affects the performance of the whole organism, or reduces the organism's ability to respond to additional environmental challenges.

1.3 "Administrative permit revision" means a revision to a permit that:

1.3.1 Corrects typographical errors;

1.3.2 Changes the name, address, or phone number of a person identified in the permit;

1.3.3 Increases the frequency of monitoring, recordkeeping, or reporting by the permittee; or

1.3.4 Changes the ownership or operational control of a source.

1.4 "Affected facility" means a process or process equipment to which a regulation is applicable.

1.5 "Air contaminant or "air pollutant" means smoke, charred paper, dust, soot, grime, carbon, noxious acids, fumes, gases, odors, or particulate matter, or any combination of these, that is emitted into or otherwise enters the outside air. These terms also include any precursors to the formation of an air contaminant or air pollutant.

1.6 "Air pollution control equipment" means equipment that may be required by law or regulation for the control of air pollution but is not vital to production of the normal product of the process or process equipment or to its normal operation.

1.7 "Alternative method" means any method of sampling and analyzing for an air pollutant that is not a reference method or an equivalent method but that has been demonstrated to the satisfaction of the U.S. Environmental Protection Agency (EPA) and the District to produce, in specific cases, results adequate for determining compliance.

1.8 "Ambient air" means that portion of the atmosphere, external to buildings, to which the general public has access. For the purpose of determining the concentration of an air contaminant that is or may be emitted by a stationary source, ambient air also includes the atmosphere, external to buildings, that is beyond the property line of that stationary source, regardless of whether the general public has access.

1.9 "Ambient air quality standard" means a numerical expression of the level of an air contaminant required to be achieved and maintained through the application of

appropriate preventive or control measures. An "ambient air quality standard" consists of two parts:

1.9.1 A specified concentration for a particular air contaminant and

1.9.2 A time-averaging interval over which that concentration is measured.

1.10 "Annual mean" means an average determined on the basis of any consecutive 12-month interval.

1.11 "Asbestos" means the asbestiform varieties of serpentinite (chrysotile), riebeckite (crocidolite), cummingtonite-grunerite, amosite, anthophyllite, and actinolite-tremolite.

1.12 "Asbestos mill" means any process or process equipment engaged in converting, or in any intermediate step in converting, asbestos ore into commercial asbestos. Outside storage of asbestos materials is not considered a part of the asbestos mill.

1.13 "Asbestos material" means asbestos or any material containing asbestos.

1.14 "Asbestos tailings" means any solid waste that contains asbestos and is a product of asbestos mining or milling operations.

1.15 "Best available control technology" (BACT) means an emission limitation, including a visible emission standard, based on the maximum degree of reduction for each pollutant subject to regulation that would be emitted from any proposed new or modified process or process equipment that the District, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for that new or modified process or process equipment through the application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment, innovative fuel combustion techniques, and pollution prevention approaches, for elimination, reduction, or control of that pollutant. In no event shall the application of BACT result in emissions of any pollutant that would exceed the emissions allowed by any applicable standard under Part 5, 6, or 7 of District regulations. If the District determines that technological or economic limitations on the application of measurement methodology to a particular process or process equipment would make the imposition of an emissions standard infeasible, a design, equipment, work practice, or operational standard, or combination of those approaches, may be prescribed instead.

1.16 "Board" means the Louisville Metro Air Pollution Control Board as provided for in KRS Chapter 77.

1.17 "Bypass" means the intentional diversion of air contaminants from air pollution control equipment or process equipment that normally reduces the emission of the air contaminants.

1.18 "Cabinet" means the Energy and Environment Cabinet of the Commonwealth of Kentucky as provided for in KRS Chapter 224.

1.19 "Commence" means that an owner or operator has obtained all necessary preconstruction approvals or permits and has either:

1.19.1 Begun, or caused to begin, a continuous program of actual on-site construction or modification, to be completed within a reasonable time, or

1.19.2 Entered into a binding agreement or a contractual obligation, that cannot be canceled or modified without substantial loss to the owner or operator, to undertake a continuous program of actual on-site construction or modification, to be completed within a reasonable time.

1.20 "Commercial asbestos" means any asbestos that is extracted from asbestos ore.

1.21 "Compliance plan and schedule" means a list of remedial measures including an enforceable sequence and timing of actions or operations leading to compliance with a limitation or standard by a specific date.

1.22 "Construction" means fabrication, erection, or installation of an affected facility or any portion of an affected facility.

1.23 "Demolition" means the wrecking or taking out of any load-supporting structural member of a structure together with any related handling operations.

1.24 "District" means the Louisville Metro Air Pollution Control District as provided for in KRS Chapter 77.

1.25 "Division" means the Division for Air Quality (DAQ) of the Energy and Environment Cabinet of the Commonwealth of Kentucky as provided for in KRS Chapter 224.

1.26 "Emission standard" means a requirement that is contained in a federal, state, or local law or regulation, District permit, or Board Order, or is otherwise legally enforceable that limits the quantity, rate, concentration, or opacity of the emission of an air contaminant on a continuous basis, including any requirement related to the operation or maintenance of a process or process equipment to assure continuous emission reduction, and any design, equipment, work practice, or operational standard.

1.27 "Emissions unit" or "facility" means a part or activity of a stationary source that emits or has the potential to emit a regulated air pollutant, any pollutant listed under the Act Section 112(b), or GHGs subject to regulation. This term is not meant to alter or affect the definition of the term "unit" as used in the Acid Rain program.

1.28 "Equivalent method" means a method of sampling and analyzing for an air pollutant that has been demonstrated to the satisfaction of the EPA to have a consistent and quantitatively-known relationship to the reference method under specified conditions.

1.29 “Excess emissions” means emissions that exceed an applicable emission standard.

1.30 "Existing affected facility," except as otherwise specified under applicable regulations, means any affected facility that is in existence or has commenced construction before the effective date of the applicable emission standard and that has not been subsequently modified or reconstructed.

1.31 ”Federally Enforceable District Origin Operating Permit” (FEDOOP) means a non-Title V operating permit issued by the District that contains a federally enforceable permit condition, limit, or provision.

1.32 "Fixed capital cost" means the capital needed to provide all of the depreciable components.

1.33 "Fuel" means natural gas, petroleum, coal, wood, and any other form of solid, liquid, or gaseous matter consumed for the purpose of creating useful heat.

1.34 “Fugitive emissions” means those emissions that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

1.35 "Hazardous air pollutant" (HAP) means any air pollutant listed in Regulation 5.14 *Hazardous Air Pollutants and Source Categories* pursuant to the Act section 112(b), 42 USC 7412(b).

1.36 "Incineration" means the process of igniting and burning solid, semi-solid, liquid, or gaseous combustible or partially combustible wastes.

1.37 "Incinerator" means any furnace used in the process of burning waste for the purpose of reducing the volume of waste by removing combustible matter.

1.38 "Insignificant activity" means the following:

1.38.1 An affected facility that is not subject to a federally enforceable requirement, other than generally applicable requirements, does not involve the incineration of medical waste, and meets one of the following provisions:

1.38.1.1 The affected facility is listed in Appendix A of Regulation 1.02 and the uncontrolled potential emissions of the affected facility do not exceed either 5 tons per year of a regulated air pollutant or 1,000 pounds per year of a hazardous air pollutant,

1.38.1.2 The affected facility is determined to be insignificant on a case-by-case basis. For a case-by-case approval, all of the following provisions are met:

1.38.1.2.1 The potential emissions of the affected facility do not exceed either 5 tons per year of a regulated air pollutant or 1000 pounds per year of a hazardous air pollutant,

1.38.1.2.2 The potential emissions of the affected facility are in conformance with the general prohibition of air pollution of Regulation 1.09, and

1.38.1.2.3 Specific approval of the affected facility as an insignificant activity was made pursuant to approval of a Title V permit issuance, renewal, or revision that had undergone the full public participation process, including the notice, comment, and EPA objection provisions, in Regulation 2.07, or

1.38.1.3 The affected facility is listed as an insignificant activity in the District's federally approved Title V permit program,

1.38.1.4 Other types of activities approved by the District for a specific stationary source on a case-by-case basis may be viewed on the District's List of Title V Operating Permits on its website.

1.38.2 For the purpose of this definition, potential emissions mean the emissions before air pollution control devices. An R&D facility that has the same SIC as the manufacturing facility or is considered a support facility at the manufacturing facility shall be considered a part of the stationary source, but may be treated as an insignificant activity if the R&D facility meets the qualifications of this definition. The emissions from insignificant activities shall be accounted for in determining major source status, and

1.38.3 For the purpose of an initial permit pursuant to this regulation, an affected facility that had been identified as an insignificant activity in a permit application that was, before December 20, 2000, determined by the District to be complete pursuant to section 3.2, and the District had determined that the potential emissions of the affected facility do not exceed either 5 tons per year of a regulated air pollutant or 1,000 pounds per year of a hazardous air pollutant, shall be treated as an insignificant activity. However, the District may require the applicant to submit additional information to demonstrate compliance with these requirements. The determination by the District that the potential emissions of an affected facility do not exceed these levels shall be subject to EPA review and approval.

1.39 "Lowest achievable emission rate" (LAER) means, for any affected facility, that rate of emissions based on the more stringent of the following:

1.39.1 The most stringent emission limitation that is contained in the implementation plan of any State for that class or category of affected facility, unless the owner or operator of the proposed affected facility demonstrates that this limitation is not achievable, or

1.39.2 The most stringent emission limitation that is achieved in practice by that class or category of affected facility taking into consideration the pollutant that must be controlled. In no event shall the application of LAER permit a proposed affected facility to emit any pollutant in excess of the amount allowable under an applicable new source standard in Part 5, 6, or 7 of District regulations or 40 CFR Part 60, 61, or 63.

1.40 "Major source", except as specified in another regulation for use in that regulation, means any stationary source, which emits, or has the potential to emit, 100 tons per year or more of any air pollutant subject to regulation under the Act, 10 tons or more of an individual HAP, or 25 tons per year or more of a combination of HAPs.

1.41 "Malfunction" means the sudden, unforeseen, and unavoidable failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner that causes, or is likely to cause, emissions that exceed an applicable emission standard, but not including a failure that is caused entirely or in part by poor maintenance, careless operation, or any other preventable upset condition or equipment breakdown.

1.42 "Maximum achievable control technology" (MACT) means the maximum achievable control technology defined in the Act section 112 (d), 42 USC 7412(d).

1.43 “Minor permit revision” means a revision to a permit that:

1.43.1 Does not violate an applicable requirement;

1.43.2 Does not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;

1.43.3 Does not require or change a case-by-case determination of (1) an emission limitation or other standard, (2) a source-specific determination for temporary sources of ambient impacts, or (3) a visibility or increment analysis;

1.43.4 Does not seek to establish or change a permit term or condition for which there is no corresponding applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. The terms and conditions include:

1.43.4.1 A federally enforceable emission cap assumed to avoid classification as a modification in a provision of the SIP, and

1.43.4.2 An alternate emissions limit approved pursuant to Section 112(i)(5) of the Act.

1.43.5 Is not a modification in the regulations promulgated by the District and does not constitute a modification under any provision of the Title I of the Act; and

1.43.6 Is not required to be processed as significant permit revisions.

1.44 “Minor source” means a stationary source that is not subject to Regulations 2.16 or 2.17.

1.45 "Modification", except as specified in another regulation for use in that regulation, means any physical change in, or change in the method of operation of, an affected facility that increases the amount of any air pollutant (to which an emission standard applies) emitted by that affected facility or that results in the emission of any air pollutant (to which an emission standard applies) not previously emitted, except that:

1.45.1 Routine maintenance, repair, and replacement shall not be considered a physical change, and

1.45.2 A change in the method of operation, unless previously limited by permit conditions, shall not include:

1.45.2.1 An increase in the production rate, if the increase does not exceed the operating design capacity of the affected facility or of the air pollution control equipment installed on the affected facility,

1.45.2.2 An increase in the hours of operation when the increase does not result in a violation of any applicable emission standards,

1.45.2.3 Use of an alternative fuel or raw material if, prior to the date any standard under this regulation becomes applicable to that affected facility, the affected facility is designed to accommodate the alternative use,

1.45.2.4 Use of an alternative fuel or raw material by reason of an order, rule, or natural gas curtailment plan approved by the District, or

1.45.2.5 A change in ownership of the stationary source.

1.46 "New affected facility" means any affected facility the construction, modification, or reconstruction of which is commenced on or after the effective date of an applicable emission standard.

1.47 "Nitrogen oxides" means all oxides of nitrogen, except nitrous oxide, as measured by test methods specified by the District.

1.48 "Odor" means the property of an air contaminant that can be detected by the sense of smell.

1.49 "Opacity" means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

1.50 "Open burning" means the burning of any matter in such a manner that the products of combustion resulting from the burning are emitted directly into the outside air without passing through a stack, chimney, vent, or other functionally equivalent opening.

1.51 "Organic compound" or "organic material" means a chemical compound of carbon that has the same meaning as "volatile organic compound."

1.52 "Outside air" or "open air" means the air outside of buildings and structures.

1.53 "Owner or Operator" means any person who owns, leases, operates, controls, or supervises one or more affected facilities.

1.54 "Particulate asbestos material" means finely divided particles of asbestos material.

1.55 "Particulate matter" means any material, except uncombined water, that exists in a finely divided form as a liquid or a solid.

1.56 "PM10" means particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by a reference method based on 40 CFR Part 50 Appendix J and designated in accordance with 40 CFR Part 53, or by an equivalent method designated in accordance with 40 CFR Part 53.

1.57 "PM2.5" means particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers as measured by a reference method based on 40 CFR Part 50 Appendix L and designated in accordance with 40 CFR Part 53, or by an equivalent method designated in accordance with 40 CFR Part 53.

1.58 "Person" means any individual, firm, co-partnership, joint venture, association, corporation, social club, fraternal organization, estate, trust, receiver, syndicate, county, city, municipality, district (for air pollution control or other purpose), or other political subdivision, or any group or combination acting as a unit, and the plural as well as the singular unit.

1.59 ”Pollution prevention” (P2) means the use of materials, processes, or practices that reduce or eliminate the creation of pollutants or wastes by the process. Pollution

prevention includes practices that reduce the use of hazardous and nonhazardous materials, energy, water, or other resources as well as practices that protect natural resources through conservation or more efficient use.

1.60 "Potential hazardous emissions" means an air pollutant, exclusive of pollutants regulated under the Act Section 112(b), 42 USC 7412(b), to which no ambient air quality standard is applicable and that, in the judgment of the District, may cause, or contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness.

1.61 "Potential to emit" (PTE) means the maximum capacity of a stationary source or an affected facility to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source or affected facility to emit a pollutant, including air pollution control equipment and restrictions on the hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source or affected facility.

1.62 "Preventable upset condition" means the sudden failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner that causes, or is likely to cause, emissions that exceed an applicable emission standard that results entirely or in part from poor maintenance, careless operation, or any other preventable upset condition or equipment breakdown.

1.63 “Process” means an action or operation, or a series of actions or operations, from which the emission of an air contaminant may originate. Examples of a “process” include any of the following:

1.63.1 The physical change of a material,

1.63.2 The chemical change of a material,

1.63.3 The combustion of a fuel, refuse, or waste material,

1.63.4 The storage of a material,

1.63.5 The handling of a material, and

1.63.6 The use of a material.

1.64 “Process equipment” means all equipment, devices, and auxiliary components, including control equipment and stacks, used in a process.

1.65 "Reactor" means a vat or vessel that may be jacketed to permit temperature control, designed to contain chemical reactions.

1.66 "Reasonably available control technology" (RACT) means devices, systems, process modifications, or other apparatus or techniques, including pollution prevention approaches, that are reasonably available taking into account the necessity of imposing those controls in order to attain and maintain a national ambient air quality standard and the social, environmental, and economic impact of those controls.

1.67 "Reconstruction" means the replacement of process equipment for an affected facility to the extent that the fixed capital cost of the new components exceeds 50% of the fixed capital cost of a comparable entirely new affected facility.

1.68 "Reference Method" means any method of sampling and analyzing for an air pollutant as prescribed in the following EPA regulations: Standards of Performance for New Stationary Sources (40 CFR Part 60), National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61), National Emission Standards for Hazardous Air Pollutants

for Source Categories (40 CFR Part 63), National Primary and Secondary Ambient Air Quality Standards (40 CFR Part 50), and Requirements for Preparation, Adoption, and Submittal of Implementation Plans (40 CFR Part 51).

1.69 "Regulated air pollutant" means the following:

1.69.1 Nitrogen oxides,

1.69.2 Volatile organic compounds,

1.69.3 A pollutant for which a national ambient air quality standard has been promulgated,

1.69.4 Any Class I or II substance subject to a standard promulgated under or established by the Act Title VI,

1.69.5 Any pollutant that is subject to a standard promulgated under the Act Section 111,

1.69.6 Any pollutant that is subject to a standard promulgated under the Act Section 112 or other requirements established under Section 112, including Sections 112(g), 112(j), and 112(r), and including the following:

1.69.6.1 Any pollutant subject to requirements under Section 112(j). If EPA fails to promulgate a standard by the date established pursuant to Section 112(e), any pollutant for which a subject source would be major shall be considered to be regulated on the date 18 months after the applicable date established pursuant to Section 112(e), and

1.69.6.2 Any pollutant for which the requirements of Section 112(g)(2) have been met, but only with respect to the individual source subject to Section 112(g)(2) requirements.

1.70 "Regulation" means a rule or order adopted by the Board pursuant to KRS Chapter 77 for the control or abatement of air contaminants within its jurisdiction or for the administration of the District.

1.71 "Responsible official" means one of the following:

1.71.1 For a corporation: a president, vice-president, secretary, or treasurer of the corporation in charge of a principal business function, or other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of that person if the representative is responsible for the overall operation of manufacturing, production, or operating facility applying for or subject to a permit and either:

1.71.1.1 The source employs more than 250 persons or has gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars), or

1.71.1.2 The delegation of authority to the representative is approved by the District;

1.71.2 For a partnership or sole proprietorship, a general partner or the proprietor, respectively;

1.71.3 For a municipal, state, federal, or other public agency, either a principal executive officer or ranking elected official, or designee. For this regulation, a principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of EPA).

1.72 "Run" means the net period of time during which an emission sample is collected. Unless otherwise specified, a run may be either intermittent or continuous within the limits of good engineering practice.

1.73 “Significant permit revision” means a revision to a permit that:

1.73.1 Does not qualify as minor permit revision or as administrative revision;

1.73.2 Includes any significant changes to or relaxation of existing monitoring, reporting, or recordkeeping permit terms or conditions;

1.73.3 Establishes new requirements; or

1.73.4 Causes emissions of any air pollutant to exceed the allowable limit specified in the permit.

1.74 "Sludge" means solid or semi-solid material produced by a treatment plant that processes municipal or industrial waste waters.

1.75 "Sludge dryer" means a device used to reduce the moisture content of a sludge by heating to temperatures above 65°C directly with combustion gases.

1.76 "Stack or chimney" means a flue, conduit, or duct arranged to conduct a gas stream to the outside air.

1.77 "Standard conditions" means:

1.77.1 For source measurements, 20°C and a pressure of 760 mm Hg, and

1.77.2 For the purpose of air quality determinations, 25°C and a reference pressure of 760 mm Hg.

1.78 "Stationary source" means all of the air pollutant-emitting activities, including all processes and process equipment that are located on one or more contiguous or adjacent properties and are under the control of the same person or persons under common control. A property shall be considered contiguous if separated by only a public thoroughfare, stream, or other right-of-way. If a transmission and fuel delivery right-of way or a strip of land that serves no other principal purpose than as a transportation or materials handling link connecting two or more otherwise separate stationary sources, then the connected stationary sources shall be considered as separate stationary sources.

1.79 "Startup" means the setting in operation of an affected facility for any purpose.

1.80 "Trivial activities" means any activity that is considered inconsequential, as determined by the District. The District will maintain a list of trivial activities. This list shall be made available to the public upon request.

1.81 “Twelve month rolling period” or “12-month rolling period” means a period of twelve consecutive months determined on a rolling basis with a new 12-month period beginning on the first day of each calendar month.

1.82 "Upset condition" means the sudden failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner that causes, or is likely to cause, emissions that exceed an applicable emission standard and that results entirely or in part from either a malfunction or a preventable upset condition.

1.83 "Uncombined water" means water that is either in a gaseous, liquid, or solid state and that is not bound to a compound by internal molecular forces.

1.84 "Volatile organic compound" (VOC) means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, that participates in atmospheric photochemical reactions.

1.84.1 The exclusions from the definition of Volatile Organic Compounds (VOC) found at 40 CFR §51.100(s)(1) as of July 1, 2018 for compounds which have been determined to have negligible photochemical reactivity are adopted and incorporated by reference.

1.84.2 Copies of the CFR are available for sale from:

U.S. Government Printing Office
Superintendent of Documents

Mail Stop SSOP
Washington, DC 20402-9328
or for free by downloading from the Internet: http://www.gpo.gov/fdsys/.

1.85 "Welfare," when referring to effects on welfare, includes, but is not limited to, effects on soils, water, crops, vegetation, man-made materials, animals, wildlife, weather, visibility, and climate, damage to and deterioration of property, and hazards to transportation, as well as effects on economic values and on personal comfort and well-being, whether caused by transformation, conversion, or combination with other air pollutants.

1.86 "Year" means a calendar year.

Adopted v1/4-19-72, effective 4-19-72; amended v2/6-13-79, v3/11-16-83, v4/4-20-88, v5/5-15-91, v6/3-17-93, v7/6-16-93, v8/9-25-96, v9/11-19-97, v10/12-19-01, v11/6-21-05, effective 7-1-05; v12/6-15-11; v13/5-15-13, v14/9-21-16, v15/06-19-19.

Appendix A to Regulation 1.02
Insignificant Activities

1. Indirect heat exchangers, except furnaces that combust waste oil regardless of size, of the following types:
   1.1. Those less than 10 million BTU/hr capacity using distillate oil, propane, butane, LPG, or natural gas as fuel, or
   1.2. Those used solely for heating residential buildings not exceeding four dwelling units.
2. Internal combustion engines, whether fixed or mobile, and vehicles used for transport of passengers or freight, except as may be provided for in subsequent regulations;
3. An affected facility that is not subject to a federally enforceable requirement, other than a generally applicable requirement and does not involve the incineration of medical waste. The following facilities are included in this category:
   3.1. Presses used exclusively for extruding metals, minerals, or wood,
   3.2. Dry cleaners for which there is no emission, performance, or other standard,
   3.3. Lint traps used in conjunction with commercial laundry and dry cleaners,
   3.4. Brazing, soldering or welding equipment,
   3.5. Equipment commonly used in wood-working operations, except for conveying, hogging or burning of sawdust or wood waste,
   3.6. Foundry core-making equipment to which no heat is applied and for which there is no emission standard,
   3.7. Ovens used exclusively for curing potting materials or castings made with epoxy resins,
   3.8. Equipment used for compression or injection molding of plastics,
   3.9. Containers, reservoirs, or tanks used exclusively for:
      3.9.1. Dipping operations for coating objects with oils, waxes, or greases and where no organic solvents, diluents, or thinners are used, or
      3.9.2. Storage of lubricating oils or fuel oils with a vapor pressure of less than 10 mm Hg at conditions of 20 oC and 760 mm of Hg,
   3.10. Emergency relief vents, stacks and ventilating systems,
   3.11. Laboratory ventilating and exhausting systems which are not used for radioactive air contaminants,
   3.12. Process, exhaust or ventilating systems in bakeries or eating establishments preparing food for human consumption,
   3.13. Blast cleaning equipment using a suspension of abrasives in water,
   3.14. Equipment used exclusively for heat treating, soaking, case hardening or surface conditioning of metal objects such as carbonizing, cyaniding, nitriding, carbonnitriding, siliconizing, or diffusion treating when natural gas or LP gas is used as fuel,
   3.15. Equipment used for washing or drying products fabricated from metal or glass provided no volatile organic materials are used in the process and no oil or solid fuel is burned,
   3.16. Equipment, machines, devices, or contrivances built or installed to be used at a domestic residence for domestic use,
   3.17. Porcelain enameling furnaces, porcelain enameling drying ovens, vitreous enameling furnaces or vitreous enameling drying ovens,

3.18. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal,

3.19. Facilities using only peanut oil, sunflower oil, cottonseed oil or canola oil,

3.20. Soil or ground water contamination remediation projects that are entirely passive or entail the total removal of the contaminated substrate for disposal in a certified landfill. Remediation systems that actively vent to the atmosphere by pumps or fans are not exempt,

3.21. Dust or particulate collectors that are located in-doors, vent directly indoors into the work space, collect no more than one ton of material per year and do not collect materials listed in Regulation 5.11, 5.12 or 5.14,

3.22. Cold solvent parts cleaners that are equipped with a functional secondary reservoir into which the solvent drains during use,

3.23. Portable diesel or gasoline storage tanks with a maximum capacity of less than 500 gallons. Portability is defined as being in one location less than one year,

3.24. Storage vessels for VOCs with a maximum capacity of 250 gallons or less,

3.25. Diesel or fuel oil storage tanks that are not used for distribution, sale or resale, and that have less than two times the capacity of the vessel in annual turnover of the fluid contained,

3.26. All pressurized VOC storage vessels, and

3.27. Research and Development (R&D) facilities.

REGULATION 1.02 Definitions

Louisville Metro Air Pollution Control District
Jefferson County, Kentucky

Pursuant To: KRS Chapter 77 Air Pollution Control
Relates To: KRS Chapter 77 Air Pollution Control
Necessity and Function: KRS 77.180 authorizes the Air Pollution Control Board to adopt and enforce all orders, rules, and regulations necessary or proper to accomplish the purposes of KRS Chapter 77. This regulation contains definitions used throughout District regulations.

SECTION 1 Definitions
The following terms shall have the meaning given to them in this regulation except as otherwise specified in the District's regulations. All terms not defined in these regulations shall have the meaning given to them in KRS 77.005, the Clean Air Act, or by commonly accepted usage.

1.1 "Act" means the Clean Air Act, 42 USC 7401 et seq.

1.2 "Acute noncancer effect" means a biochemical change, functional impairment, or pathological lesion that is produced within a short period of time following an exposure and that affects the performance of the whole organism, or reduces the organism's ability to respond to additional environmental challenges.

1.3 "Administrative permit revision" means a revision to a permit that:

1.3.1 Corrects typographical errors;

1.3.2 Changes the name, address, or phone number of a person identified in the permit;

1.3.3 Increases the frequency of monitoring, recordkeeping, or reporting by the permittee; or

1.3.4 Changes the ownership or operational control of a source.

1.4 "Affected facility" means a process or process equipment to which a regulation is applicable.

1.5 "Air contaminant or "air pollutant" means smoke, charred paper, dust, soot, grime, carbon, noxious acids, fumes, gases, odors, or particulate matter, or any combination of these, that is emitted into or otherwise enters the outside air. These terms also include any precursors to the formation of an air contaminant or air pollutant.

1.6 "Air pollution control equipment" means equipment that may be required by law or regulation for the control of air pollution but is not vital to production of the normal product of the process or process equipment or to its normal operation.

1.7 "Alternative method" means any method of sampling and analyzing for an air pollutant that is not a reference method or an equivalent method but that has been demonstrated to the satisfaction of the U.S. Environmental Protection Agency (EPA) and the District to produce, in specific cases, results adequate for determining compliance.

1.8 "Ambient air" means that portion of the atmosphere, external to buildings, to which the general public has access. For the purpose of determining the concentration of an air contaminant that is or may be emitted by a stationary source, ambient air also includes the atmosphere, external to buildings, that is beyond the property line of that stationary source, regardless of whether the general public has access.

1.9 "Ambient air quality standard" means a numerical expression of the level of an air contaminant required to be achieved and maintained through the application of

appropriate preventive or control measures. An "ambient air quality standard" consists of two parts:

1.9.1 A specified concentration for a particular air contaminant and

1.9.2 A time-averaging interval over which that concentration is measured.

1.10 "Annual mean" means an average determined on the basis of any consecutive 12-month interval.

1.11 "Asbestos" means the asbestiform varieties of serpentinite (chrysotile), riebeckite (crocidolite), cummingtonite-grunerite, amosite, anthophyllite, and actinolite-tremolite.

1.12 "Asbestos mill" means any process or process equipment engaged in converting, or in any intermediate step in converting, asbestos ore into commercial asbestos. Outside storage of asbestos materials is not considered a part of the asbestos mill.

1.13 "Asbestos material" means asbestos or any material containing asbestos.

1.14 "Asbestos tailings" means any solid waste that contains asbestos and is a product of asbestos mining or milling operations.

1.15 "Best available control technology" (BACT) means an emission limitation, including a visible emission standard, based on the maximum degree of reduction for each pollutant subject to regulation that would be emitted from any proposed new or modified process or process equipment that the District, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for that new or modified process or process equipment through the application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment, innovative fuel combustion techniques, and pollution prevention approaches, for elimination, reduction, or control of that pollutant. In no event shall the application of BACT result in emissions of any pollutant that would exceed the emissions allowed by any applicable standard under Part 5, 6, or 7 of District regulations. If the District determines that technological or economic limitations on the application of measurement methodology to a particular process or process equipment would make the imposition of an emissions standard infeasible, a design, equipment, work practice, or operational standard, or combination of those approaches, may be prescribed instead.

1.16 "Board" means the Louisville Metro Air Pollution Control Board as provided for in KRS Chapter 77.

1.17 "Bypass" means the intentional diversion of air contaminants from air pollution control equipment or process equipment that normally reduces the emission of the air contaminants.

1.18 "Cabinet" means the Energy and Environment Cabinet of the Commonwealth of Kentucky as provided for in KRS Chapter 224.

1.19 "Commence" means that an owner or operator has obtained all necessary preconstruction approvals or permits and has either:

1.19.1 Begun, or caused to begin, a continuous program of actual on-site construction or modification, to be completed within a reasonable time, or

1.19.2 Entered into a binding agreement or a contractual obligation, that cannot be canceled or modified without substantial loss to the owner or operator, to undertake a continuous program of actual on-site construction or modification, to be completed within a reasonable time.

1.20 "Commercial asbestos" means any asbestos that is extracted from asbestos ore.

1.21 "Compliance plan and schedule" means a list of remedial measures including an enforceable sequence and timing of actions or operations leading to compliance with a limitation or standard by a specific date.

1.22 "Construction" means fabrication, erection, or installation of an affected facility or any portion of an affected facility.

1.23 "Demolition" means the wrecking or taking out of any load-supporting structural member of a structure together with any related handling operations.

1.24 "District" means the Louisville Metro Air Pollution Control District as provided for in KRS Chapter 77.

1.25 "Division" means the Division for Air Quality (DAQ) of the Energy and Environment Cabinet of the Commonwealth of Kentucky as provided for in KRS Chapter 224.

1.26 "Emission standard" means a requirement that is contained in a federal, state, or local law or regulation, District permit, or Board Order, or is otherwise legally enforceable that limits the quantity, rate, concentration, or opacity of the emission of an air contaminant on a continuous basis, including any requirement related to the operation or maintenance of a process or process equipment to assure continuous emission reduction, and any design, equipment, work practice, or operational standard.

1.27 "Emissions unit" or "facility" means a part or activity of a stationary source that emits or has the potential to emit a regulated air pollutant, any pollutant listed under the Act Section 112(b), or GHGs subject to regulation. This term is not meant to alter or affect the definition of the term "unit" as used in the Acid Rain program.

1.28 "Equivalent method" means a method of sampling and analyzing for an air pollutant that has been demonstrated to the satisfaction of the EPA to have a consistent and quantitatively-known relationship to the reference method under specified conditions.

1.29 “Excess emissions” means emissions that exceed an applicable emission standard.

1.30 "Existing affected facility," except as otherwise specified under applicable regulations, means any affected facility that is in existence or has commenced construction before the effective date of the applicable emission standard and that has not been subsequently modified or reconstructed.

1.31 ”Federally Enforceable District Origin Operating Permit” (FEDOOP) means a non-Title V operating permit issued by the District that contains a federally enforceable permit condition, limit, or provision.

1.32 "Fixed capital cost" means the capital needed to provide all of the depreciable components.

1.33 "Fuel" means natural gas, petroleum, coal, wood, and any other form of solid, liquid, or gaseous matter consumed for the purpose of creating useful heat.

1.34 “Fugitive emissions” means those emissions that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

1.35 "Hazardous air pollutant" (HAP) means any air pollutant listed in Regulation 5.14 *Hazardous Air Pollutants and Source Categories* pursuant to the Act section 112(b), 42 USC 7412(b).

1.36 "Incineration" means the process of igniting and burning solid, semi-solid, liquid, or gaseous combustible or partially combustible wastes.

1.37 "Incinerator" means any furnace used in the process of burning waste for the purpose of reducing the volume of waste by removing combustible matter.

1.38 "Insignificant activity" means the following:

1.38.1 An affected facility that is not subject to a federally enforceable requirement, other than generally applicable requirements, does not involve the incineration of medical waste, and meets one of the following provisions:

1.38.1.1 The affected facility is listed in Appendix A of Regulation 1.02 and the uncontrolled potential emissions of the affected facility do not exceed either 5 tons per year of a regulated air pollutant or 1,000 pounds per year of a hazardous air pollutant,

1.38.1.2 The affected facility is determined to be insignificant on a case-by-case basis. For a case-by-case approval, all of the following provisions are met:

1.38.1.2.1 The potential emissions of the affected facility do not exceed either 5 tons per year of a regulated air pollutant or 1000 pounds per year of a hazardous air pollutant,

1.38.1.2.2 The potential emissions of the affected facility are in conformance with the general prohibition of air pollution of Regulation 1.09, and

1.38.1.2.3 Specific approval of the affected facility as an insignificant activity was made pursuant to approval of a Title V permit issuance, renewal, or revision that had undergone the full public participation process, including the notice, comment, and EPA objection provisions, in Regulation 2.07, or

1.38.1.3 The affected facility is listed as an insignificant activity in the District's federally approved Title V permit program,

1.38.1.4 Other types of activities approved by the District for a specific stationary source on a case-by-case basis may be viewed on the District's List of Title V Operating Permits on its website.

1.38.2 For the purpose of this definition, potential emissions mean the emissions before air pollution control devices. An R&D facility that has the same SIC as the manufacturing facility or is considered a support facility at the manufacturing facility shall be considered a part of the stationary source, but may be treated as an insignificant activity if the R&D facility meets the qualifications of this definition. The emissions from insignificant activities shall be accounted for in determining major source status, and

1.38.3 For the purpose of an initial permit pursuant to this regulation, an affected facility that had been identified as an insignificant activity in a permit application that was, before December 20, 2000, determined by the District to be complete pursuant to section 3.2, and the District had determined that the potential emissions of the affected facility do not exceed either 5 tons per year of a regulated air pollutant or 1,000 pounds per year of a hazardous air pollutant, shall be treated as an insignificant activity. However, the District may require the applicant to submit additional information to demonstrate compliance with these requirements. The determination by the District that the potential emissions of an affected facility do not exceed these levels shall be subject to EPA review and approval.

1.39 "Lowest achievable emission rate" (LAER) means, for any affected facility, that rate of emissions based on the more stringent of the following:

1.39.1 The most stringent emission limitation that is contained in the implementation plan of any State for that class or category of affected facility, unless the owner or operator of the proposed affected facility demonstrates that this limitation is not achievable, or

1.39.2 The most stringent emission limitation that is achieved in practice by that class or category of affected facility taking into consideration the pollutant that must be controlled. In no event shall the application of LAER permit a proposed affected facility to emit any pollutant in excess of the amount allowable under an applicable new source standard in Part 5, 6, or 7 of District regulations or 40 CFR Part 60, 61, or 63.

1.40 "Major source", except as specified in another regulation for use in that regulation, means any stationary source, which emits, or has the potential to emit, 100 tons per year or more of any air pollutant subject to regulation under the Act, 10 tons or more of an individual HAP, or 25 tons per year or more of a combination of HAPs.

1.41 "Malfunction" means the sudden, unforeseen, and unavoidable failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner that causes, or is likely to cause, emissions that exceed an applicable emission standard, but not including a failure that is caused entirely or in part by poor maintenance, careless operation, or any other preventable upset condition or equipment breakdown.

1.42 "Maximum achievable control technology" (MACT) means the maximum achievable control technology defined in the Act section 112 (d), 42 USC 7412(d).

1.43 “Minor permit revision” means a revision to a permit that:

1.43.1 Does not violate an applicable requirement;

1.43.2 Does not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;

1.43.3 Does not require or change a case-by-case determination of (1) an emission limitation or other standard, (2) a source-specific determination for temporary sources of ambient impacts, or (3) a visibility or increment analysis;

1.43.4 Does not seek to establish or change a permit term or condition for which there is no corresponding applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. The terms and conditions include:

1.43.4.1 A federally enforceable emission cap assumed to avoid classification as a modification in a provision of the SIP, and

1.43.4.2 An alternate emissions limit approved pursuant to Section 112(i)(5) of the Act.

1.43.5 Is not a modification in the regulations promulgated by the District and does not constitute a modification under any provision of the Title I of the Act; and

1.43.6 Is not required to be processed as significant permit revisions.

1.44 “Minor source” means a stationary source that is not subject to Regulations 2.16 or 2.17.

1.45 "Modification", except as specified in another regulation for use in that regulation, means any physical change in, or change in the method of operation of, an affected facility that increases the amount of any air pollutant (to which an emission standard applies) emitted by that affected facility or that results in the emission of any air pollutant (to which an emission standard applies) not previously emitted, except that:

1.45.1 Routine maintenance, repair, and replacement shall not be considered a physical change, and

1.45.2 A change in the method of operation, unless previously limited by permit conditions, shall not include:

1.45.2.1 An increase in the production rate, if the increase does not exceed the operating design capacity of the affected facility or of the air pollution control equipment installed on the affected facility,

1.45.2.2 An increase in the hours of operation when the increase does not result in a violation of any applicable emission standards,

1.45.2.3 Use of an alternative fuel or raw material if, prior to the date any standard under this regulation becomes applicable to that affected facility, the affected facility is designed to accommodate the alternative use,

1.45.2.4 Use of an alternative fuel or raw material by reason of an order, rule, or natural gas curtailment plan approved by the District, or

1.45.2.5 A change in ownership of the stationary source.

1.46 "New affected facility" means any affected facility the construction, modification, or reconstruction of which is commenced on or after the effective date of an applicable emission standard.

1.47 "Nitrogen oxides" means all oxides of nitrogen, except nitrous oxide, as measured by test methods specified by the District.

1.48 "Odor" means the property of an air contaminant that can be detected by the sense of smell.

1.49 "Opacity" means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

1.50 "Open burning" means the burning of any matter in such a manner that the products of combustion resulting from the burning are emitted directly into the outside air without passing through a stack, chimney, vent, or other functionally equivalent opening.

1.51 "Organic compound" or "organic material" means a chemical compound of carbon that has the same meaning as "volatile organic compound."

1.52 "Outside air" or "open air" means the air outside of buildings and structures.

1.53 "Owner or Operator" means any person who owns, leases, operates, controls, or supervises one or more affected facilities.

1.54 "Particulate asbestos material" means finely divided particles of asbestos material.

1.55 "Particulate matter" means any material, except uncombined water, that exists in a finely divided form as a liquid or a solid.

1.56 "PM10" means particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by a reference method based on 40 CFR Part 50 Appendix J and designated in accordance with 40 CFR Part 53, or by an equivalent method designated in accordance with 40 CFR Part 53.

1.57 "PM2.5" means particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers as measured by a reference method based on 40 CFR Part 50 Appendix L and designated in accordance with 40 CFR Part 53, or by an equivalent method designated in accordance with 40 CFR Part 53.

1.58 "Person" means any individual, firm, co-partnership, joint venture, association, corporation, social club, fraternal organization, estate, trust, receiver, syndicate, county, city, municipality, district (for air pollution control or other purpose), or other political subdivision, or any group or combination acting as a unit, and the plural as well as the singular unit.

1.59 ”Pollution prevention” (P2) means the use of materials, processes, or practices that reduce or eliminate the creation of pollutants or wastes by the process. Pollution

prevention includes practices that reduce the use of hazardous and nonhazardous materials, energy, water, or other resources as well as practices that protect natural resources through conservation or more efficient use.

1.60 "Potential hazardous emissions" means an air pollutant, exclusive of pollutants regulated under the Act Section 112(b), 42 USC 7412(b), to which no ambient air quality standard is applicable and that, in the judgment of the District, may cause, or contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness.

1.61 "Potential to emit" (PTE) means the maximum capacity of a stationary source or an affected facility to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source or affected facility to emit a pollutant, including air pollution control equipment and restrictions on the hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source or affected facility.

1.62 "Preventable upset condition" means the sudden failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner that causes, or is likely to cause, emissions that exceed an applicable emission standard that results entirely or in part from poor maintenance, careless operation, or any other preventable upset condition or equipment breakdown.

1.63 “Process” means an action or operation, or a series of actions or operations, from which the emission of an air contaminant may originate. Examples of a “process” include any of the following:

1.63.1 The physical change of a material,

1.63.2 The chemical change of a material,

1.63.3 The combustion of a fuel, refuse, or waste material,

1.63.4 The storage of a material,

1.63.5 The handling of a material, and

1.63.6 The use of a material.

1.64 “Process equipment” means all equipment, devices, and auxiliary components, including control equipment and stacks, used in a process.

1.65 "Reactor" means a vat or vessel that may be jacketed to permit temperature control, designed to contain chemical reactions.

1.66 "Reasonably available control technology" (RACT) means devices, systems, process modifications, or other apparatus or techniques, including pollution prevention approaches, that are reasonably available taking into account the necessity of imposing those controls in order to attain and maintain a national ambient air quality standard and the social, environmental, and economic impact of those controls.

1.67 "Reconstruction" means the replacement of process equipment for an affected facility to the extent that the fixed capital cost of the new components exceeds 50% of the fixed capital cost of a comparable entirely new affected facility.

1.68 "Reference Method" means any method of sampling and analyzing for an air pollutant as prescribed in the following EPA regulations: Standards of Performance for New Stationary Sources (40 CFR Part 60), National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61), National Emission Standards for Hazardous Air Pollutants

for Source Categories (40 CFR Part 63), National Primary and Secondary Ambient Air Quality Standards (40 CFR Part 50), and Requirements for Preparation, Adoption, and Submittal of Implementation Plans (40 CFR Part 51).

1.69 "Regulated air pollutant" means the following:

1.69.1 Nitrogen oxides,

1.69.2 Volatile organic compounds,

1.69.3 A pollutant for which a national ambient air quality standard has been promulgated,

1.69.4 Any Class I or II substance subject to a standard promulgated under or established by the Act Title VI,

1.69.5 Any pollutant that is subject to a standard promulgated under the Act Section 111,

1.69.6 Any pollutant that is subject to a standard promulgated under the Act Section 112 or other requirements established under Section 112, including Sections 112(g), 112(j), and 112(r), and including the following:

1.69.6.1 Any pollutant subject to requirements under Section 112(j). If EPA fails to promulgate a standard by the date established pursuant to Section 112(e), any pollutant for which a subject source would be major shall be considered to be regulated on the date 18 months after the applicable date established pursuant to Section 112(e), and

1.69.6.2 Any pollutant for which the requirements of Section 112(g)(2) have been met, but only with respect to the individual source subject to Section 112(g)(2) requirements.

1.70 "Regulation" means a rule or order adopted by the Board pursuant to KRS Chapter 77 for the control or abatement of air contaminants within its jurisdiction or for the administration of the District.

1.71 "Responsible official" means one of the following:

1.71.1 For a corporation: a president, vice-president, secretary, or treasurer of the corporation in charge of a principal business function, or other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of that person if the representative is responsible for the overall operation of manufacturing, production, or operating facility applying for or subject to a permit and either:

1.71.1.1 The source employs more than 250 persons or has gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars), or

1.71.1.2 The delegation of authority to the representative is approved by the District;

1.71.2 For a partnership or sole proprietorship, a general partner or the proprietor, respectively;

1.71.3 For a municipal, state, federal, or other public agency, either a principal executive officer or ranking elected official, or designee. For this regulation, a principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of EPA).

1.72 "Run" means the net period of time during which an emission sample is collected. Unless otherwise specified, a run may be either intermittent or continuous within the limits of good engineering practice.

1.73 “Significant permit revision” means a revision to a permit that:

1.73.1 Does not qualify as minor permit revision or as administrative revision;

1.73.2 Includes any significant changes to or relaxation of existing monitoring, reporting, or recordkeeping permit terms or conditions;

1.73.3 Establishes new requirements; or

1.73.4 Causes emissions of any air pollutant to exceed the allowable limit specified in the permit.

1.74 "Sludge" means solid or semi-solid material produced by a treatment plant that processes municipal or industrial waste waters.

1.75 "Sludge dryer" means a device used to reduce the moisture content of a sludge by heating to temperatures above 65°C directly with combustion gases.

1.76 "Stack or chimney" means a flue, conduit, or duct arranged to conduct a gas stream to the outside air.

1.77 "Standard conditions" means:

1.77.1 For source measurements, 20°C and a pressure of 760 mm Hg, and

1.77.2 For the purpose of air quality determinations, 25°C and a reference pressure of 760 mm Hg.

1.78 "Stationary source" means all of the air pollutant-emitting activities, including all processes and process equipment that are located on one or more contiguous or adjacent properties and are under the control of the same person or persons under common control. A property shall be considered contiguous if separated by only a public thoroughfare, stream, or other right-of-way. If a transmission and fuel delivery right-of way or a strip of land that serves no other principal purpose than as a transportation or materials handling link connecting two or more otherwise separate stationary sources, then the connected stationary sources shall be considered as separate stationary sources.

1.79 "Startup" means the setting in operation of an affected facility for any purpose.

1.80 "Trivial activities" means any activity that is considered inconsequential, as determined by the District. The District will maintain a list of trivial activities. This list shall be made available to the public upon request.

1.81 “Twelve month rolling period” or “12-month rolling period” means a period of twelve consecutive months determined on a rolling basis with a new 12-month period beginning on the first day of each calendar month.

1.82 "Upset condition" means the sudden failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner that causes, or is likely to cause, emissions that exceed an applicable emission standard and that results entirely or in part from either a malfunction or a preventable upset condition.

1.83 "Uncombined water" means water that is either in a gaseous, liquid, or solid state and that is not bound to a compound by internal molecular forces.

1.84 "Volatile organic compound" (VOC) means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, that participates in atmospheric photochemical reactions. ~~The following organic compounds have been determined by the EPA to have negligible photochemical reactivity and are also excluded:~~

1.84.1 The exclusions from the definition of Volatile Organic Compounds (VOC) found at 40 CFR §51.100(s)(1) as of July 1, 2018 for compounds which have been determined to have negligible photochemical reactivity are adopted and incorporated by reference.

1.84.2 Copies of the CFR are available for sale from:

U.S. Government Printing Office
Superintendent of Documents
Mail Stop SSOP
Washington, DC 20402-9328

~~1.84.1~~ or for free by downloading from the Internet: http://www.gpo.gov/fdsys/~~Methane, .Ethane,~~

~~1.84.2 Methylene chloride (dichloromethane),~~
~~1.84.3 1,1,1-trichloroethane (methyl chloroform),~~
~~1.84.4 1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113),~~
~~1.84.5 Trichlorofluoromethane (CFC-11),~~
~~1.84.6 Dichlorodifluoromethane (CFC-12),~~
~~1.84.7 Chlorodifluoromethane (HCFC-22),~~
~~1.84.8 Trifluoromethane (HFC-23),~~
~~1.84.9 1,2-dichloro-1,1,2,2-tetrafluoroethane (CFC-114),~~
~~1.84.10 Chloropentafluoroethane (CFC-115),~~
~~1.84.11 1,1,1-trifluoro-2,2-dichloroethane (HCFC-123),~~
~~1.84.12 1,1,1,2-tetrafluoroethane (HFC-134a),~~
~~1.84.13 1,1-dichloro-1-fluoroethane (HCFC-141b),~~
~~1.84.14 1-chloro-1,1-difluoroethane (HCFC-142b),~~
~~1.84.15 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124),~~
~~1.84.16 Pentafluoroethane (HFC-125),~~
~~1.84.17 1,1,2,2-tetrafluoroethane (HFC-134),~~
~~1.84.18 1,1,1-trifluoroethane (HFC-143a),~~
~~1.84.19 1,1-difluoroethane (HFC-152a),~~
~~1.84.20 Parachlorobenzotrifluoride (PCBTF),~~
~~1.84.21 Cyclic, branched, or linear completely methylated siloxanes,~~
~~1.84.22 Acetone,~~
~~1.84.23 Perchloroethylene (tetrachloroethylene),~~
~~1.84.24 3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca),~~
~~1.84.25 1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb),~~
~~1.84.26 1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC-43-10mee),~~
~~1.84.27 Difluoromethane (HFC-32),~~
~~1.84.28 Ethylfluoride (HFC-161),~~
~~1.84.29 1,1,1,3,3,3-hexafluoropropane (HFC-236fa),~~
~~1.84.30 1,1,2,2,3-pentafluoropropane (HFC-245ca),~~
~~1.84.31 1,1,2,3,3-pentafluoropropane (HFC-245ea),~~
~~1.84.32 1,1,1,2,3-pentafluoropropane (HFC-245eb),~~
~~1.84.33 1,1,1,3,3-pentafluoropropane (HFC-245fa),~~
~~1.84.34 1,1,1,2,3,3-hexafluoropropane (HFC-236ea),~~
~~1.84.35 1,1,1,3,3-pentafluorobutane (HFC-365mfc),~~
~~1.84.36 Chlorofluoromethane (HCFC-31),~~
~~1.84.37 1-chloro-1-fluoroethane (HCFC-151a),~~
~~1.84.38 1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a),~~
~~1.84.39 1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane (C4F9OCH3) or HFE-7100,~~
~~1.84.40 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3- heptafluoropropane[(CF3)2CFCF2OCH3],~~
~~1.84.41 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane (C4F9OC2H5) or HFE-7200,~~

~~1.84.42 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane [(CF3)2CFCF2OC2H5],~~
~~1.84.43 Perfluorocarbon compounds that fall into the following classes:~~
~~1.84.43.1 Cyclic, branched, or linear, completely fluorinated alkanes,~~
~~1.84.43.2 Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations,~~
~~1.84.43.3 Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations, and~~
~~1.84.43.4 Sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine,~~
~~1.84.44Methyl acetate,~~
~~1.84.45 1,1,1,2,2,3,3-heptafluoro-3-methoxy-propane (HFE-7000) or (n-C3F7OCH3),~~
~~1.84.46 3-ethoxy-1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2-(trifluoromethyl) hexane (HFE-7500),~~
~~1.84.47 1,1,1,2,3,3,3-heptafluoropropane (HFC 227ea),~~
~~1.84.48 Methyl formate HCOOCH3,~~
~~1.84.49 t-butyl acetate,~~
~~1.84.50 1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethyl-pentane (HFE-7300) or C2F5CF(OCH3)CF(CF3)2~~
~~1.84.51 Dimethyl carbonate,~~
~~1.84.52 Propylene carbonate,~~
~~1.84.53 HFE-347pcf2~~

1.85 "Welfare," when referring to effects on welfare, includes, but is not limited to, effects on soils, water, crops, vegetation, man-made materials, animals, wildlife, weather, visibility, and climate, damage to and deterioration of property, and hazards to transportation, as well as effects on economic values and on personal comfort and well-being, whether caused by transformation, conversion, or combination with other air pollutants.

1.86 "Year" means a calendar year.

Adopted v1/4-19-72, effective 4-19-72; amended v2/6-13-79, v3/11-16-83, v4/4-20-88, v5/5-15-91, v6/3-17-93, v7/6-16-93, v8/9-25-96, v9/11-19-97, v10/12-19-01, v11/6-21-05, effective 7-1-05; v12/6-15-11; v13/5-15-13, v14/9-21-16, v15/06-19-19.

Appendix A to Regulation 1.02
Insignificant Activities

1. Indirect heat exchangers, except furnaces that combust waste oil regardless of size, of the following types:
   1.1. Those less than 10 million BTU/hr capacity using distillate oil, propane, butane, LPG, or natural gas as fuel, or
   1.2. Those used solely for heating residential buildings not exceeding four dwelling units.
2. Internal combustion engines, whether fixed or mobile, and vehicles used for transport of passengers or freight, except as may be provided for in subsequent regulations;
3. An affected facility that is not subject to a federally enforceable requirement, other than a generally applicable requirement and does not involve the incineration of medical waste. The following facilities are included in this category:
   3.1. Presses used exclusively for extruding metals, minerals, or wood,
   3.2. Dry cleaners for which there is no emission, performance, or other standard,
   3.3. Lint traps used in conjunction with commercial laundry and dry cleaners,
   3.4. Brazing, soldering or welding equipment,
   3.5. Equipment commonly used in wood-working operations, except for conveying, hogging or burning of sawdust or wood waste,
   3.6. Foundry core-making equipment to which no heat is applied and for which there is no emission standard,
   3.7. Ovens used exclusively for curing potting materials or castings made with epoxy resins,
   3.8. Equipment used for compression or injection molding of plastics,
   3.9. Containers, reservoirs, or tanks used exclusively for:
      3.9.1. Dipping operations for coating objects with oils, waxes, or greases and where no organic solvents, diluents, or thinners are used, or
      3.9.2. Storage of lubricating oils or fuel oils with a vapor pressure of less than 10 mm Hg at conditions of 20 oC and 760 mm of Hg,
   3.10. Emergency relief vents, stacks and ventilating systems,
   3.11. Laboratory ventilating and exhausting systems which are not used for radioactive air contaminants,
   3.12. Process, exhaust or ventilating systems in bakeries or eating establishments preparing food for human consumption,
   3.13. Blast cleaning equipment using a suspension of abrasives in water,
   3.14. Equipment used exclusively for heat treating, soaking, case hardening or surface conditioning of metal objects such as carbonizing, cyaniding, nitriding, carbonnitriding, siliconizing, or diffusion treating when natural gas or LP gas is used as fuel,
   3.15. Equipment used for washing or drying products fabricated from metal or glass provided no volatile organic materials are used in the process and no oil or solid fuel is burned,
   3.16. Equipment, machines, devices, or contrivances built or installed to be used at a domestic residence for domestic use,
   3.17. Porcelain enameling furnaces, porcelain enameling drying ovens, vitreous enameling furnaces or vitreous enameling drying ovens,

3.18. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal,
3.19. Facilities using only peanut oil, sunflower oil, cottonseed oil or canola oil,
3.20. Soil or ground water contamination remediation projects that are entirely passive or entail the total removal of the contaminated substrate for disposal in a certified landfill. Remediation systems that actively vent to the atmosphere by pumps or fans are not exempt,
3.21. Dust or particulate collectors that are located in-doors, vent directly indoors into the work space, collect no more than one ton of material per year and do not collect materials listed in Regulation 5.11, 5.12 or 5.14,
3.22. Cold solvent parts cleaners that are equipped with a functional secondary reservoir into which the solvent drains during use,
3.23. Portable diesel or gasoline storage tanks with a maximum capacity of less than 500 gallons. Portability is defined as being in one location less than one year,
3.24. Storage vessels for VOCs with a maximum capacity of 250 gallons or less,
3.25. Diesel or fuel oil storage tanks that are not used for distribution, sale or resale, and that have less than two times the capacity of the vessel in annual turnover of the fluid contained,
3.26. All pressurized VOC storage vessels, and
3.27. Research and Development (R&D) facilities.

LOUISVILLE METRO AIR POLLUTION CONTROL DISTRICT
REGULATORY IMPACT ASSESSMENT

REGULATION 1.04 VERSION 7
Performance Tests

JUNE 19, 2019

Purpose of the Action:

The purpose of these amendments is to specify requirements for valid performance testing. This is achieved by adding a new section that lays out the requirements for a Site-Specific Test Plan and by clarifying the required timeline for notifications.

Scope of the Amendments:

Timing requirements for notifications have been clarified in the regulation. All test protocols, as described in the new section discussed above, must be submitted at least 30 calendar days in advance of the projected start date of any performance test. A final "intent to test" notification, including the specific date and time testing is to begin, must be submitted to the District at least 10 working days in advance of the start of testing. Finally, the District may arrange a pre-test survey and conference 20 working days in advance of the testing. Further, a new section explicitly requiring a final test report be submitted within sixty (60) days has been added.

Estimated Costs and Savings:

The changes to the regulation clarify procedures already required by the District, and U.S. EPA where noted, so no additional costs are expected. It is possible modest savings may occur as a result of these clarifications as a result of avoiding potential misunderstandings of the requirements for a specific test method or timing of a test protocol.

Feasibility of All Alternatives:

The updates only clarify, standardize, and give notice of current District procedures. For this reason, changes to the standards established in Regulation 1.04 were not considered as a part of these changes, and are not currently considered necessary.

Comparison with Any Minimum or Uniform Standards:

Standards established in Regulation 1.04 are not changed by the proposed amendments; the proposed amendments merely clarify the requirements for submission of certain site-specific testing protocols and final reports. Other regulations that may require more stringent or different testing protocols are not affected by the proposed amendments to Regulation 1.04 .

Report on Public Outreach Efforts:

Drafts of proposed Regulations were proposed for formal review on April 17, 2019, and sent to all members of the Louisville Metro Air Pollution Control Board, all persons who have requested to be notified of proposed changes to any District regulations; EPA Region 4; and the Kentucky Division for Air Quality.

The public had an opportunity to comment at a meeting of the appropriate committee of the Air Pollution Control Board, during the informal and formal public comment periods, and at a public hearing prior to consideration by the full Board.

REGULATION 1.04 Performance Tests

Air Pollution Control District of Jefferson County
Jefferson County, Kentucky

Relates To: KRS Chapter 77 Air Pollution Control
Pursuant To: KRS Chapter 77 Air Pollution Control
Necessity and Function: KRS 77.180 provides that the Air Pollution Control Board may make and enforce all orders, rules, and regulations necessary or proper to accomplish the purposes of KRS Chapter 77. This regulation establishes procedures for conducting performance tests to demonstrate compliance with the District's regulations.

SECTION 1 Applicability
This regulation applies to any affected facility as defined in Regulation 1.02.

SECTION 2 Test Requirements
2.1 The District or the Administrator of the United States Environmental Protection Agency (EPA), for cause, may require the owner or operator of any affected facility to sample emissions in accordance with EPA test method procedures. Alternate procedures may be used in special circumstances upon advance approval by the District or the Administrator of the EPA. All tests shall be made under the direction of persons qualified by training and experience in the field of air pollution control.
2.2 The District or the Administrator of the EPA may conduct tests of emissions of air contaminants from any source.
2.3 Performance tests required by the District or District regulations shall be conducted and data reduced in accordance with the methods and procedures specified by the District.
2.4 The District and the Administrator of the EPA may waive the requirement for performance tests if, in the case of an existing affected facility, the owner or operator proves to the District and the Administrator of the EPA's satisfaction that the test cannot be performed due to physical plant limitations or extreme economic burden.
2.5 In the event of the need for certification of a CEMS, the District or the Administrator of the EPA may waive advance notice.
2.6 If the affected facility is required to conduct performance testing pursuant to a standard of performance promulgated under 40 CFR Part 60, 40 CFR Part 61, or 40 CFR Part 63, then those specified procedures shall be used unless:
2.6.1 The Administrator of the EPA and the District specify or approve the use of a reference method with minor changes in methodology,
2.6.2 The Administrator of the EPA and the District approve the use of an equivalent method,
2.6.3 The Administrator of the EPA and the District approve the use of an alternative method, the results of which have been determined to be adequate for indicating whether a specific source

is in compliance, or

2.6.4 The Administrator of the EPA and the District waive the requirement for performance tests for an affected facility for which a standard of performance has been promulgated under 40 CFR Part 60, 40 CFR Part 61, or 40 CFR Part 63 because the owner or operator of that affected facility has demonstrated to the agency's satisfaction that the affected facility is deemed to be in compliance with the applicable standard.

2.7 Agreements with the facility's owner or operator to modify any test procedures from the Reference Methods of 40 CFR Part 60 Appendix A, 40 CFR Part 61 Appendix B, or 40 CFR Part 63 Appendix A shall be documented in writing.

2.8 The owner or operator shall permit the District or the Administrator of the EPA to conduct performance tests at any reasonable time, shall cause the affected facility to be operated for purposes of those tests under the conditions as the District or the Administrator of the EPA may specify based on representative performance of the affected facility, and shall make available to the District those records as may be necessary to determine the performance.

2.9 The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

2.9.1 Sampling ports adequate for test methods applicable to that facility,

2.9.2 Safe sampling platforms,

2.9.3 Safe access to sampling platforms, and

2.9.4 Utilities for sampling and testing equipment.

2.10 Each performance test shall consist of separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable regulation. For the purpose of determining compliance with an applicable standard, the arithmetic mean of three runs shall apply. The arithmetic mean shall be determined carrying all significant digits in data and calculations to the final emission rate calculation. The final emission rate shall then be determined by rounding off to the last significant digit of the applicable standard; i.e., dropping the following digit if it is 4 or less, or adding 1 to the last significant digit if the following digit is 5 or greater.

2.10.1 Once performance testing has begun, a person conducting the testing shall not halt a sampling run except due to:

2.10.1.1 Forced shutdown;

2.10.1.2 Failure of an irreplaceable portion of the sample train;

2.10.1.3 Extreme meteorological conditions; or

2.10.1.4 Unforeseen circumstances beyond the owner's or operator's control.

2.10.2 The person conducting the testing shall not halt a sampling run for the purpose of making adjustments to the parameters of the performance test.

2.11 If a sample is accidentally lost or conditions occur in which 1 of the 3 runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the owner's or operator's control, then compliance may, upon the District's approval, be determined using the arithmetic

mean of the results of the 2 other runs.

SECTION 3 Testing Notification

3.1 The owner or operator of an affected facility shall submit a test protocol at least 30 calendar days prior to the projected start date of any performance test. A sample form shall be prepared and made available by the District.

3.2 A pre-test conference may be arranged 20 working days in advance of the projected starting date for the performance test.

3.2.1 This meeting shall be arranged by District personnel after receivinga test protocol.

3.2.2 The conference shall include a representative from the facility, the test team leader, and the District's selected observer for the proposed test.

3.3 The owner or operator of an affected facility shall submit a final "intent to test" notification to the District at least 10 working days prior to the start of the performance test, which shall afford the District the opportunity to have an observer present.

SECTION 4 Notification Waiver

In the event of an emergency or malfunction, the District may waive any of the following:

4.1 Notice of intent to test,

4.2 The pre-test conference, and

4.3 The prior notice requirement of section 3.1.

SECTION 5 Test Report

5.1 The owner or operator of an affected facility shall submit a final test report within sixty (60) calendar days of the completion of any performance test.

5.2 The final test report shall include all data collected, including data from any aborted or rejected runs, as well as all other data specified in the test protocol for collection such as operating or other parametric data.

Adopted v1/4-19-72; effective 4-19-72; amended v2/9-1-76, v3/4-21-82, v4/11-16-83, v5/12-15-93, v6/11-19-97, v7/06-19-19.

REGULATION 1.04 Performance Tests

Air Pollution Control District of Jefferson County
Jefferson County, Kentucky

Relates To: KRS Chapter 77 Air Pollution Control
Pursuant To: KRS Chapter 77 Air Pollution Control
Necessity and Function: KRS 77.180 provides that the Air Pollution Control Board may make and enforce all orders, rules, and regulations necessary or proper to accomplish the purposes of KRS Chapter 77. This regulation establishes procedures for conducting performance tests to demonstrate compliance with the District's regulations.

SECTION 1 Applicability
This regulation applies to any affected facility as defined in Regulation 1.02.

SECTION 2 Test Requirements
2.1 The District or the Administrator of the United States Environmental Protection Agency (EPA), for cause, may require the owner or operator of any affected facility to sample emissions in accordance with EPA test method procedures. Alternate procedures may be used in special circumstances upon advance approval by the District or the Administrator of the EPA. All tests shall be made under the direction of persons qualified by training and experience in the field of air pollution control.
2.2 The District or the Administrator of the EPA may conduct tests of emissions of air contaminants from any source.
2.3 Performance tests required by the District or District regulations shall be conducted and data reduced in accordance with the methods and procedures specified by the District.
2.4 The District ~~or~~ and the Administrator of the EPA may waive the requirement for performance tests if, in the case of an existing affected facility, the owner or operator proves to the District~~'s~~ ~~or~~and the Administrator of the EPA's satisfaction that the test cannot be performed due to physical plant limitations or extreme economic burden.
2.5 In the event of the need for certification of a CEMS, the District or the Administrator of the EPA may waive advance notice.
2.6 If the affected facility is ~~subject~~ required to conduct performance testing pursuant to a standard of performance promulgated under 40 CFR Part 60, 40 CFR Part 61, or 40 CFR Part 63, then those specified procedures shall be used unless:
2.6.1 The Administrator of the EPA ~~EPA~~ and the District specify or approve the use of a reference method with minor changes in methodology,
2.6.2 The Administrator of the EPA ~~EPA~~ and the District approve the use of an equivalent method,

2.6.3 The Administrator of the EPA ~~EPA~~ and the District approve the use of an alternative method, the results of which have been determined to be adequate for indicating whether a specific source is in compliance, or

2.6.4 The Administrator of the EPA ~~EPA~~ and the District waive the requirement for performance tests for an affected facility for which a standard of performance has been promulgated under 40 CFR Part 60, 40 CFR Part 61, or 40 CFR Part 63 because the owner or operator of that affected facility has demonstrated to the agency's~~'~~ satisfaction that the affected facility is deemed to be in compliance with the applicable standard.

2.7 Agreements with the facility's owner or operator to modify any test procedures from the Reference Methods of 40 CFR Part 60 Appendix A, 40 CFR Part 61 Appendix B, or 40 CFR Part 63 Appendix A shall be documented in writing.

2.8 The owner or operator shall permit the District or the Administrator of the EPA to conduct performance tests at any reasonable time, shall cause the affected facility to be operated for purposes of those tests under the conditions as the District or the Administrator of the EPA may specify based on representative performance of the affected facility, and shall make available to the District those records as may be necessary to determine the performance.

~~2.9 The owner or operator of an affected facility shall provide the District at least 10 working days prior notice of the scheduled starting date for the performance test to afford the District the opportunity to have an observer present.~~

~~2.10~~2.9 The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

~~2.10.1~~2.9.1 Sampling ports adequate for test methods applicable to that facility,

~~2.10.2~~2.9.2 Safe sampling platforms,

~~2.10.3~~2.9.3 Safe access to sampling platforms, and

~~2.10.4~~2.9.4 Utilities for sampling and testing equipment.

2.10 Each performance test shall consist of separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable regulation. For the purpose of determining compliance with an applicable standard, the arithmetic mean of three runs shall apply. The arithmetic mean shall be determined carrying all significant digits in data and calculations to the final emission rate calculation. The final emission rate shall then be determined by rounding off to the last significant digit of the applicable standard; i.e., dropping the following digit if it is 4 or less, or adding 1 to the last significant digit if the following digit is 5 or greater.

2.10.1 Once performance testing has begun, a person conducting the testing shall not halt a sampling run except due to:

2.10.1.1 Forced shutdown;

2.10.1.2 Failure of an irreplaceable portion of the sample train;

2.10.1.3 Extreme meteorological conditions; or

2.10.1.4 Unforeseen circumstances beyond the owner's or operator's control.

2.10.2 The person conducting the testing shall not halt a sampling run for the purpose of making

adjustments to the parameters of the performance test.

2.11 If a sample is accidentally lost or conditions occur in which 1 of the 3 runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the owner's or operator's control, then compliance may, upon the District's approval, be determined using the arithmetic mean of the results of the 2 other runs.

SECTION 3 Testing Notification

3.1 The owner or operator of an affected facility shall submit a test protocol at least 30 calendar ~~25 working~~ days prior to the projected start date of any performance test. A sample form shall be prepared and made available by the District.

3.2 A pre-test ~~survey and~~ conference ~~shall~~ may be arranged ~~at least~~ 20 working days in advance of the projected starting date for the performance test.

~~3.1.1~~3.2.1 This meeting shall be arranged by District personnel after receiving ~~the owner's or operator's notification of the "intent to test" a facility~~a test protocol. ~~The notification of intent must be submitted to the District at least 25 working days in advance of the projected starting date for the performance test. Prior to the meeting, available information on the facility shall be submitted and reviewed to focus attention on those areas that might jeopardize a successful test.~~

3.2.2 The conference shall include a representative from the facility, the test team leader, and the District's selected observer for the proposed test.

3.3 The owner or operator of an affected facility shall submit a final "intent to test" notification to the District at least 10 working days prior to the start of the performance test, which shall afford the District the opportunity to have an observer present.

SECTION 4 Notification Waiver

In the event of an emergency or malfunction, the District may waive an~~yd~~ of the following:

4.1 Notice of intent to test,

4.2 The pre-test ~~survey and~~ conference, and

4.3 The prior notice requirement of section ~~2.9~~3.1.

SECTION 5 Test Report

5.1 The owner or operator of an affected facility shall submit a final test report within sixty (60) calendar days of the completion of any performance test.

~~4.3~~5.2 The final test report shall include all data collected, including data from any aborted or rejected runs, as well as all other data specified in the test protocol for collection such as operating or other parametric data.

Adopted v1/4-19-72; effective 4-19-72; amended v2/9-1-76, v3/4-21-82, v4/11-16-83, v5/12-15-93, v6/11-19-97, v7/06-19-19.

REGULATION 1.15 Version of Federal Regulations Adopted and Incorporated by Reference

Air Pollution Control District of Jefferson County
Jefferson County, Kentucky

Relates to: KRS Chapter 77 Air Pollution Control
Pursuant to: KRS Chapter 77 Air Pollution Control
Necessity and Function: KRS 77.180 authorizes the Air Pollution Control Board to adopt and enforce all orders, rules, and regulations necessary or proper to accomplish the purposes of KRS Chapter 77. This regulation identifies the version of the EPA regulations that have been adopted and incorporated by reference.

SECTION 1 General Definition

In the federal regulations adopted and incorporated by reference in these regulations, "Regional Administrator," "EPA," and "Agency" shall be read as "District" and "this subpart" shall be read as "this regulation," unless otherwise specified in these regulations.

SECTION 2 Date of Regulation

All federal regulations adopted and incorporated by reference in the regulations shall be the version in the *Code of Federal Regulations* (CFR) Title 40 as of July 1, 2018, unless otherwise specified in a District regulation.

SECTION 3 Availability

Copies of the CFR are available:

3.1 For sale from:

U.S. Government Printing Office
Superintendent of Documents
Mail Stop SSOP
Washington, DC 20402-9328

3.2 For free by downloading from the Internet: http://www.gpo.gov/fdsys/

Adopted v1/4-20-88 effective 4-20-88; amended v2/12-21-88, v3/9-15-93, v4/3-20-96, v5/4-15-98, v6/7-21-99, v7/3-15-00, v8/6-20-01, v9/2-20-02, v10/2-19-03, v11/3-17-04, v12/9-21-05, v13/3-15-06, v14/2-20-08, v15/4-20-11, v16/5-16-12, v17/10-21-15, v18/9-21-16, v19/01-17-18, v20/06-19-19.

REGULATION 1.15 Version of Federal Regulations Adopted and Incorporated by Reference

Air Pollution Control District of Jefferson County
Jefferson County, Kentucky

Relates to: KRS Chapter 77 Air Pollution Control
Pursuant to: KRS Chapter 77 Air Pollution Control
Necessity and Function: KRS 77.180 authorizes the Air Pollution Control Board to adopt and enforce all orders, rules, and regulations necessary or proper to accomplish the purposes of KRS Chapter 77. This regulation identifies the version of the EPA regulations that have been adopted and incorporated by reference.

SECTION 1 General Definition
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Washington, DC 20402-9328
3.2 For free by downloading from the Internet: http://www.gpo.gov/fdsys/

Adopted v1/4-20-88 effective 4-20-88; amended v2/12-21-88, v3/9-15-93, v4/3-20-96, v5/4-15-98, v6/7-21-99, v7/3-15-00, v8/6-20-01, v9/2-20-02, v10/2-19-03, v11/3-17-04, v12/9-21-05, v13/3-15-06, v14/2-20-08, v15/4-20-11, v16/5-16-12, v17/10-21-15, v18/9-21-16, v19/01-17-18, v20/06-19-19.

LOUISVILLE METRO AIR POLLUTION CONTROL DISTRICT
REGULATORY IMPACT ASSESSMENT

REGULATION 6.13 VERSION 8
Standard of Performance for Existing Storage Vessels for Volatile Organic Compounds

REGULATION 6.31 VERSION 7
Standard of Performance for Existing Miscellaneous Metal Parts and Products Surface Coating Operations

REGULATION 7.12 VERSION 8
Standard of Performance for New Storage Vessels for Volatile Organic Compounds

REGULATION 7.59 VERSION 7
Standard of Performance for New Miscellaneous Metal Parts and Products Surface Coating Operations

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JUNE 19, 2019

Purpose of the Action:

The draft regulations are meant to clarify amendments made in January 2018.

Scope of the Amendments:

Each regulation was amended in January 2018 to state more clearly the applicability or exemptions already implicit in the regulation. These further amendments are meant to clarify those exemptions and limitations in applicability.

The exemptions in Regulations 6.31 and 7.59 are updated to clarify the exemption is only as to the emissions standards in each reg, as section 6.5 of these respective regulations already explicitly contains recordkeeping requirements.

The applicability sections of Regulations 6.13 and 7.12 were updated previously to limit applicability to each "vessel for volatile organic compounds … that has a storage capacity greater than 250 gallons and true vapor pressure of the VOCs as stored equal to or greater than 78 mm Hg (1.5 psia)." However, Section 5.1 still contained monitoring requirements "[w]hen a liquid having a true vapor pressure greater than 7.0 kPa (1.0 psia) is stored in an external floating roof tank with a capacity of greater than 151,400 liters (40,000 gallons) not equipped with a secondary seal or approved alternative control technology". This section is updated in these amendments to match the applicability of 1.5 psia. The District currently permits no external floating roof tanks without secondary seals or approved alternative technologies, so this monitoring requirement does not currently apply to any facilities. Further, because section 3.4 of these regulations explicitly requires secondary seals for nearly all storage tanks with capacity of greater than 40,000 gallons, there are nearly no types of tanks which could fall under the monitoring requirements of section 5.1. The sole exception would be welded tanks with a capacity of greater than 40,000 gallons, and a true vapor pressure of less than 27.6 kPa (4.0 psia) and certain types of primary seals – a very small portion of the hundreds of facilities to which these regulations are applicable. For these reasons the District is confident the amendments will not result in any change in emissions, or result in any way in a diminishment of our ability to continue to enforce these standards as to the hundreds of facilities to which they are applicable.

Finally, units in Regulations 6.13 and 7.12 are updated from mm Hg (psia) to the SI standard kPa, retaining parenthetical conversions to psia for consistency and ease of reference.

Estimated Costs and Savings:

None, these amendments are merely clarifying.

Feasibility of All Alternatives:

None, these amendments are merely clarifying.

Comparison with Any Minimum or Uniform Standards:

There are no relevant minimum or uniform standards.

Report on Public Outreach Efforts:

Drafts of proposed Regulations were proposed for formal review on April 17, 2019, and sent to all members of the Louisville Metro Air Pollution Control Board, all persons who have requested to be notified of proposed changes to any District regulations; EPA Region 4; and the Kentucky Division for Air Quality.

The public had an opportunity to comment at a meeting of the appropriate committee of the Air Pollution Control Board, during the informal and formal public comment periods, and at a public hearing prior to consideration by the full Board.

REGULATION 6.13 Standard of Performance for Existing Storage Vessels for Volatile Organic Compounds

Air Pollution Control District of Jefferson County
Jefferson County, Kentucky

Relates To: KRS Chapter 77 Air Pollution Control
Pursuant To: KRS Chapter 77 Air Pollution Control
Necessity And Function: KRS 77.180 provides that the Air Pollution Control board may make and enforce all needful order, rules, and regulations necessary or proper to accomplish the purposes of KRS Chapter 77. This regulation provides for the control of emissions of volatile organic compounds from existing storage vessels.

SECTION 1 Applicability
This regulation applies to each affected facility which means each storage vessel for volatile organic compounds which was in being or commenced construction, modification, or reconstruction on or before April 19, 1972, and that has a storage capacity greater than 250 gallons and true vapor pressure of the VOCs as stored equal to or greater than ~~78 mm Hg~~10.4 kPa (1.5 psia). Any source that is ever subject to this regulation will always be subject to it unless the source changes its process to one not covered by this regulation.

SECTION 2 Definitions
Terms used in this regulation not defined herein shall have the meaning given them in Regulation 1.02.

2.1 "External floating roof" means a storage vessel cover in an open top tank consisting of a double deck or pontoon single deck which rests upon and is supported by the volatile organic compound being contained and is equipped with closure seals to close the space between the roof edge and tank shell.

2.2 "Floating roof" means a storage vessel cover consisting of a double deck, pontoon single deck, internal floating cover or covered floating roof, which rests upon and is supported by the volatile organic compound being contained and is equipped with a closure seal or seals to close the space between the roof edge and tank wall.

2.3 "Internal floating roof" means a cover or roof in a fixed roof tank which rests upon or is floated upon the volatile organic compound being contained, and is equipped with closure seals to close the space between the roof edge and tank shell.

2.4 "Liquid-mounted" means a primary seal mounted so that the bottom of the seal covers the liquid surface between the tank shell and the floating roof.

2.5 "Metallic shoe seal" includes but is not limited to a metal sheet held vertically against the tank wall by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

~~2.5~~2.6 "Reid vapor pressure" is the absolute vapor pressure of certain volatile organic compounds as determined by methods specified by the District.

~~2.6~~2.7 "Seal" means a sliding seal, either a metallic-shoe-type or a non-metallic resilient-type seal which prevents volatile organic compounds from escaping around the perimeter of the floating roof.

~~2.7~~2.8 "Storage vessel" means any tank, reservoir, or container used for the storage of volatile organic compounds, but does not include:

~~2.7.1~~2.8.1 Pressure vessels which are designed to operate in excess of 15 pounds per square inch gauge without emissions to the atmosphere except under emergency conditions;

~~2.7.2~~2.8.2 Subsurface caverns or porous rock reservoirs;

~~2.7.3~~2.8.3 Underground tanks if the total volume of volatile organic compounds added to and taken from a tank annually does not exceed twice the volume of the tank; or

~~2.7.4~~2.8.4 Portable tanks of less than 500 gallons capacity which are used for the temporary storage of a product or intermediate product in a manufacturing process.

~~2.8~~2.9 "Submerged fill pipe" means any fill pipe the discharge of which is entirely submerged when the liquid level is six inches above the bottom of the tank; or when applied to a tank which is loaded from the side, shall mean every fill pipe the discharge opening of which is entirely submerged when the liquid level is two times the fill pipe diameter above the bottom of the tank.

~~2.9~~2.10True vapor pressure" means the equilibrium partial pressure exerted by a volatile organic compound as determined in accordance with methods described in American Petroleum Institute Bulletin 2517, "Evaporation Loss from Floating Roof Tanks" second edition, February 1980.

~~2.10~~2.11 "Vapor-mounted" means a primary seal mounted so that there is an annular vapor space underneath the seal. The annular vapor space is bounded by the bottom of the primary seal, the tank shell, the liquid surface, and the floating roof.

~~2.11~~2.12 "Vapor recovery system" means a vapor gathering system capable of collecting all volatile organic compounds discharged from the storage vessel and a vapor disposal system capable of processing such volatile organic compounds so as to prevent no less than 85% of the emission to the atmosphere.

SECTION 3 Standard for Volatile Organic Compounds

The owner or operator of any storage vessel to which this regulation applies shall store volatile organic compounds as follows:

3.1 If the storage vessel has a storage capacity greater than 151,400 liters (40,000 gallons) and if the true vapor pressure of the volatile organic compounds as stored, is equal to or greater than ~~78 mm Hg~~10.4 kPa (1.5 psia) but not greater than ~~570 mm Hg~~76 kPa (11.~~0~~1 psia) the storage vessel shall be equipped with a floating roof, a vapor recovery system, or their equivalent.

3.2 If the storage vessel has a storage capacity greater than 151,400 liters (40,000 gallons) and if the true vapor pressure of the volatile organic compounds as stored is greater than ~~570 mm Hg~~76 kPa (11.~~01~~ psia), the storage vessel shall be equipped with a vapor recovery system or its equivalent.

3.3 If the storage vessel has a storage capacity greater than 946.25 liters (250 gallons) but less than 151,400 liters (40,000 gallons), and if the true vapor pressure of the volatile organic compound, as stored, is equal to or greater than 1.5 psia, as a minimum it shall be equipped with a permanent submerged fill pipe. Storage vessels under this subsection are exempt from the requirements of sections 4 and 5. True vapor pressure "as stored" shall be determined on an instantaneous basis under conditions representing expected worst case conditions.

3.4 If the storage vessel is an external floating roof tank with a storage capacity greater than 151,400 liters (40,000 gallons), it shall be retrofitted with a continuous secondary seal extending from the floating roof to the tank wall (a rim-mounted secondary) if:

3.4.1 The tank is a welded tank, the true vapor pressure of the contained liquid is 27.6 kilopascal (4.0 psia) or greater, and the primary seal is one of the following:

3.4.1.1 A metallic-type shoe seal, a liquid-mounted foam seal, or a liquid-mounted liquid-filled type seal; or

3.4.1.2 Any other closure device which can be demonstrated equivalent to the above primary seals.

3.4.2 The tank is a riveted tank and the true vapor pressure of the contained liquid is 10.3 kilopascal (1.5 psia) or greater.

3.4.3 The tank is a welded tank, the true vapor pressure of the contained liquid is 10.3 kilopascal (1.5 psia) or greater and the primary seal is vapor-mounted. If such primary seal closure device can be demonstrated equivalent to the primary seals described in section 3.4.1, then the secondary seal is required when the vapor pressure is 27.6 kilopascal (4.0 psia) or greater.

SECTION 4 Operating Requirements

4.1 There shall be no visible holes, tears, or other openings in the seal or any seal fabric; and

4.2 All openings, except stub drains, shall be equipped with covers, lids, or seals such that:

4.2.1 The cover, lid, or seal is in the closed position at all times except when in actual use;

4.2.2 Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports; and

4.2.3 Rim vents, if provided, are set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting.

4.3 External floating roof tanks subject to this regulation shall meet the additional requirements:

4.3.1 The seals must be intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall;

4.3.2 The gap area of gaps exceeding 0.32 cm (1/8 in) in width between the secondary seal installed pursuant to section 3.4.1 and the tank wall shall not exceed 6.5 sq cm /0.3 m of tank diameter (1.0 sq in /ft);

4.3.3 All openings in the external floating roof, except for automatic bleeder vents, rim space, and leg sleeves, are to provide a projection below the liquid surface; and

4.3.4 Any emergency roof drain is to be provided with a slotted membrane fabric cover or equivalent that covers at least 90% of the area of the opening.

SECTION 5 Monitoring of Operations

5.1 When a liquid having a true vapor pressure greater than ~~7.0~~10.4 kPa (1.5~~0~~ psia) is stored in an external floating roof tank with a capacity of greater than 151,400 liters (40,000 gallons) not equipped with a secondary seal or approved alternative control technology, the owner or operator shall maintain a record of the average monthly storage temperature, the type of liquid, and the Reid vapor pressure of the liquid. The owner or operator shall retain the record for two years after the date on which the record was made.

5.2 The true vapor pressure shall be determined by using the average monthly storage temperature and typical Reid vapor pressure of the contained liquid or from typical available data on the contained liquid. Supporting analytical data shall be requested by the District if there is a question on the values reported.

5.3 The owner or operator of a petroleum liquid storage vessel with an external floating roof subject to this regulation shall:

5.3.1 Perform routine inspections semi-annually in order to ensure compliance with section 4, and the inspections shall include a visual inspection of the secondary seal gap;

5.3.2 Measure the secondary seal gap annually in accordance with section 4 when the floating roof is equipped with a vapor-mounted primary seal; and

5.3.3 Maintain records of the types of volatile petroleum liquids stored, the maximum true pressure of the liquid, as stored, and the results of the inspections performed in section 5.3.1.

5.4 Compliance provision. Compliance with section 4 will be determined by:

5.4.1 Physically measuring the length and width of all gaps around the entire circumference of the secondary seal in each place where a 0.32 cm (1/8 in) uniform diameter probe passes freely (without forcing or binding against the seal) between the seal and tank wall; and,

5.4.2 Summing the area of the individual gaps.

SECTION 6 Exemptions

Any of the following types of external floating roof tanks storing liquid petroleum shall be exempt from section 3.4:

6.1 A metallic-type shoe seal in a welded tank which has a secondary seal from the top of the shoe seal to the tank wall (a shoe-mounted secondary);

6.2 External floating roof tanks storing waxy, heavy pour crudes; and

6.3 External floating roof tanks with a closure or other devices which can be demonstrated to the District to be equivalent to the seals required in section 3.4.1.

Adopted v1/4-19-72; effective 4-19-72; amended v2/10-17-72, v3/9-1-76, v4/2-19-86, v5/4-20-88, v6/5-15-91, v7/01-17-18, v8/06-19-19.

LOUISVILLE METRO AIR POLLUTION CONTROL DISTRICT
REGULATORY IMPACT ASSESSMENT

REGULATION 6.21 VERSION 2
Standard of Performance for Existing Gasoline Loading Facilities At Bulk Terminals

REGULATION 7.20 VERSION 3
Standard of Performance for New Gasoline Loading Facilities At Bulk Terminals

JUNE 19, 2019

Purpose of the Action:

The Louisville Metro Air Pollution Control District implements the federal Clean Air Act in Louisville by delegation from the U. S. Environmental Protection Agency (EPA) and in partnership with the Kentucky Division for Air Quality through a grant of concurrent jurisdiction. KRS 224.20-130. District Regulations Parts 6 & 7 apply more stringent standards to a broader cross-section of sources than the federal New Source Performance Standards (NSPS) alone, as part of the District's grant of concurrent jurisdiction. These amendments to Regulations 6.21 & 7.20 would remove the requirement for tanker trucks loading at bulk terminals to possess a valid Kentucky pressure-vacuum test sticker, and instead replaces it with specific vapor tightness and recordkeeping requirements.

Scope of the Amendments:

The amendments remove the requirement for tanker trucks loading at bulk terminals to possess a valid Kentucky pressure-vacuum test sticker, and instead replaces it with specific vapor tightness and recordkeeping requirements. These specific requirements are based on 40 CFR Part 60, Appendix A.

Estimated Costs and Savings:

Currently all gasoline tanker trucks that load at bulk terminals in Louisville Metro are required to have a valid Kentucky Division for Air Quality (DAQ)-issued sticker indicating that the tanker

and its vapor-collection system have passed a leak test. The sticker fee charged by DAQ is $10. The District welcomes any comment during this informal comment period on costs or savings which would be related to these amendments.

Feasibility of All Alternatives:

The District does not believe there are any feasible alternatives to these amendments.

Comparison with Any Minimum or Uniform Standards:

These amendments conform to 40 CFR Part 60, Appendix A; and 401 KAR 63.031.

Report on Public Outreach Efforts:

Drafts of proposed Regulations were proposed for formal review on April 17, 2019, and sent to all members of the Louisville Metro Air Pollution Control Board, all persons who have requested to be notified of proposed changes to any District regulations; EPA Region 4; and the Kentucky Division for Air Quality.

The public had an opportunity to comment at a meeting of the appropriate committee of the Air Pollution Control Board, during the informal and formal public comment periods, and at a public hearing prior to consideration by the full Board.

REGULATION 6.21 Standard of Performance for Existing Gasoline Loading Facilities at Bulk Terminals

Air Pollution Control District of Jefferson County
Jefferson County, Kentucky

Relates To: KRS Chapter 77 Air Pollution Control
Pursuant To: KRS Chapter 77 Air Pollution Control
Necessity And Function: KRS 77.180 provides that the air pollution control board may make and enforce all needful orders, rules, and regulations necessary or proper to accomplish the purposes of KRS Chapter 77. This regulation provides for the control of emissions from existing loading facilities at bulk terminals.

SECTION 1 Applicability
This regulation applies to each affected facility which was in being or had a construction permit issued by the District on or before June 13, 1979.

SECTION 2 Definitions
Terms used in this regulation not defined herein shall have the meaning given them in Regulation 1.02.

2.1 "Affected facility" means the facilities at a bulk gasoline terminal for loading gasoline into tank trucks, trailers, railroad tank cars, or other mobile, non-marine vessels.

2.2 "Bulk gasoline terminal" means a facility for the storage and dispensing of gasoline where incoming gasoline loads are received by pipeline, marine tanks, or barge (solely or in combination with tank trucks, trailers, railroad tank cars, or other mobile, non-marine vessels) and where outgoing gasoline loads are transferred by tank trucks, trailers, railroad tank cars, or other mobile non-marine vessels.

2.3 "Gasoline" means any petroleum distillate used as a fuel for internal combustion engines and having a Reid vapor pressure of four pounds per square inch or greater.

SECTION 3 Standard for Volatile Organic Compounds

3.1 No owner or operator of any loading facility shall load gasoline unless such facility is equipped with a vapor control system which is in good working order and in operation.

3.2 Loading shall be accomplished in such a manner that all displaced vapor and air will be vented only to the vapor collection system. Measures shall be taken to prevent liquid drainage from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected.

3.3 No owner or operator shall permit the volatile organic compound emissions from the vapor control device to exceed 80 milligrams per liter of gasoline loaded.

3.4 No owner or operator shall open tank hatches or allow hatches to be opened at any time during loading operations if bottom-fill is practiced. If top-submerged fill is practiced, the

hatch is to be opened the minimum time necessary to install and remove the submerged fill pipe and associated vapor collection equipment.

3.5 No owner or operator shall permit gasoline to be spilled, discarded in sewers, stored in open containers, or handled in any other manner that would result in evaporation.

3.6 No owner or operator of a bulk gasoline terminal subject to this regulation shall allow loading on or after April 1, 1983 unless the following provisions are met:

3.6.1 The vapor control system and associated equipment are designed and operated to prevent gauge pressure in the tank truck or trailer from exceeding 450 mm water (18 inches water) and prevent vacuum from exceeding 150 mm water (six inches water);

3.6.2 A pressure tap or any equivalent system as approved by the District is installed on the vapor collection system so that a liquid manometer, supplied by the owner or operator, can be connected to the tap in order to determine compliance with section 3.6.1. The pressure tap shall be installed by the owner or operator as close as possible to the connection with the tank truck or trailer, and shall consist of a 1/4 inch tubing connector which is compatible with the use of 3/16 inch inside diameter plastic tubing;

3.6.3 During loading operations there is no reading greater than or equal to 100% of the lower explosive limit (LEL, measured as propane) at a distance of 2.5 centimeters (one inch) from the potential leak source associated with the vapor collection system of a bulk gasoline terminal as detected by a combustible gas detector using the test procedure in section 5.4; and

3.6.4 Loadings of liquid product into gasoline tank trucks shall be limited to vapor-tight gasoline tank trucks using the following procedures:

3.6.4.1 No owner or operator of an affected facility shall allow loading unless the gasoline tank truck and its vapor collection system have been tested as having a pressure change of no more than seventy-five (75) mm water (three (3) in. water) in five (5) minutes when pressurized to 450 mm water (eighteen (18) in. water) and evacuated to 150 mm water (six (6) in. water) using the test procedure in section 3.6.4.2 of this regulation.

3.6.4.2 Method 27, "Determination of Vapor Tightness of Gasoline Delivery Tank Using Pressure-Vacuum Test", specified in 40 CFR 60, Appendix A, July 1, 1991, or an alternate procedure approved by the District, shall be used to determine compliance with section 3.6.4.1 of this administrative regulation. The owner or operator of the tank truck shall have the tank truck tested annually and shall maintain records of test data, date of testing, identification of tank truck, type of repair, retest data and date. Records shall be maintained by the owner or operator of the tank truck for two (2) years after the date of testing and shall be made available upon request by the District.

SECTION 4 Monitoring and Reporting Requirements

The owner or operator shall conduct such monitoring of operations and submit records as specified by the District.

SECTION 5 Compliance

5.1 The design of the vapor control system is subject to the approval of the District.

5.2 Methods specified by the District shall be used to determine compliance with section 3, except as required in sections 5.3 and 5.4.

5.3 The test procedure, as defined in "Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals," EPA-450/2-77-026, (OAQPS No. 1.2-082) Appendix A shall be used to determine compliance with section 3.6. Each bulk gasoline terminal subject to this regulation shall use leak tight tank trucks for the compliance test. For purposes of testing using Appendix A, a leak-tight tank truck is one that during loading has no reading greater than or equal to 100% of the lower explosive limit (LEL, measured as propane), at a distance of 2.5 centimeters (one inch) from the potential leak source associated with the gasoline tank truck or trailer and its vapor collection system, as detected by a combustible gas detector using the test procedure in section 5.4.

5.4 The test procedure, as defined in "Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems (OAQPS 1.2-119) Appendix B, or an equivalent procedure approved by the District, shall be used to determine compliance with section 3.6.3 during inspections conducted pursuant to KRS 77.165 or KRS 224.10-100 (10) and with the requirements of section 5.3.

SECTION 6 Compliance Timetable

6.1 The owner or operator of an affected facility shall be required to complete the following:

6.1.1 Submit a final control plan for achieving compliance with this regulation by September 1, 1979;

6.1.2 Award the control system contract by January 1, 1980;

6.1.3 Initiate on-site construction or installation of emission control equipment by July 1, 1980;

6.1.4 Complete on-site construction or installation of emission control equipment by March 1, 1981; and

6.1.5 Achieve final compliance by May 1, 1981.

6.2 The owner or operator of an affected facility shall achieve final compliance with section 3.6 by April 1, 1983.

Adopted v1/6-13-79, effective 6-13-79; amended v2/11-16-83, v3/06-19-19.

REGULATION 6.21 Standard of Performance for Existing Gasoline Loading Facilities at Bulk Terminals

Air Pollution Control District of Jefferson County
Jefferson County, Kentucky

Relates To: KRS Chapter 77 Air Pollution Control
Pursuant To: KRS Chapter 77 Air Pollution Control
Necessity And Function: KRS 77.180 provides that the air pollution control board may make and enforce all needful orders, rules, and regulations necessary or proper to accomplish the purposes of KRS Chapter 77. This regulation provides for the control of emissions from existing loading facilities at bulk terminals.

SECTION 1 Applicability
This regulation applies to each affected facility which was in being or had a construction permit issued by the District on or before June 13, 1979.

SECTION 2 Definitions
Terms used in this regulation not defined herein shall have the meaning given them in Regulation 1.02.

2.1 "Affected facility" means the facilities at a bulk gasoline terminal for loading gasoline into tank trucks, trailers, railroad tank cars, or other mobile, non-marine vessels.

2.2 "Bulk gasoline terminal" means a facility for the storage and dispensing of gasoline where incoming gasoline loads are received by pipeline, marine tanks, or barge (solely or in combination with tank trucks, trailers, railroad tank cars, or other mobile, non-marine vessels) and where outgoing gasoline loads are transferred by tank trucks, trailers, railroad tank cars, or other mobile non-marine vessels.

2.3 "Gasoline" means any petroleum distillate used as a fuel for internal combustion engines and having a Reid vapor pressure of four pounds per square inch or greater.

SECTION 3 Standard for Volatile Organic Compounds

3.1 No owner or operator of any loading facility shall load gasoline unless such facility is equipped with a vapor control system which is in good working order and in operation.

3.2 Loading shall be accomplished in such a manner that all displaced vapor and air will be vented only to the vapor collection system. Measures shall be taken to prevent liquid drainage from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected.

3.3 No owner or operator shall permit the volatile organic compound emissions from the vapor control device to exceed 80 milligrams per liter of gasoline loaded.

3.4 No owner or operator shall open tank hatches or allow hatches to be opened at any time during loading operations if bottom-fill is practiced. If top-submerged fill is practiced, the hatch is to be opened the minimum time necessary to install and remove the submerged fill pipe and associated vapor collection equipment.

3.5 No owner or operator shall permit gasoline to be spilled, discarded in sewers, stored in open containers, or handled in any other manner that would result in evaporation.

3.6 No owner or operator of a bulk gasoline terminal subject to this regulation shall allow loading on or after April 1, 1983 unless the following provisions are met:

3.6.1 The vapor control system and associated equipment are designed and operated to prevent gauge pressure in the tank truck or trailer from exceeding 450 mm water (18 inches water) and prevent vacuum from exceeding 150 mm water (six inches water);

3.6.2 A pressure tap or any equivalent system as approved by the District is installed on the vapor collection system so that a liquid manometer, supplied by the owner or operator, can be connected to the tap in order to determine compliance with section 3.6.1. The pressure tap shall be installed by the owner or operator as close as possible to the connection with the tank truck or trailer, and shall consist of a 1/4 inch tubing connector which is compatible with the use of 3/16 inch inside diameter plastic tubing;

3.6.3 During loading operations there is no reading greater than or equal to 100% of the lower explosive limit (LEL, measured as propane) at a distance of 2.5 centimeters (one inch) from the potential leak source associated with the vapor collection system of a bulk gasoline terminal as detected by a combustible gas detector using the test procedure in section 5.4; and

3.6.4 Loadings of liquid product into gasoline tank trucks shall be limited to vapor-tight gasoline tank trucks using the following procedures:

3.6.4.1 No owner or operator of an affected facility shall allow loading unless the gasoline tank truck and its vapor collection system have been tested as having a pressure change of no more than seventy-five (75) mm water (three (3) in. water) in five (5) minutes when pressurized to 450 mm water (eighteen (18) in. water) and evacuated to 150 mm water (six (6) in. water) using the test procedure in section 3.6.4.2 of this regulation.

3.6.4.2 Method 27, "Determination of Vapor Tightness of Gasoline Delivery Tank Using Pressure-Vacuum Test", specified in 40 CFR 60, Appendix A, July 1, 1991, or an alternate procedure approved by the District, shall be used to determine compliance with section 3.6.4.1 of this administrative regulation. The owner or operator of the tank truck shall have the tank truck tested annually and shall maintain records of test data, date of testing, identification of tank truck, type of repair, retest data and date. Records shall be maintained by the owner or operator of the tank truck for two (2) years after the date of testing and shall be made available upon request by the District.

~~The tank truck or trailer has a valid Kentucky pressure-vacuum test sticker as required by Regulation 6.37 attached and visibly displayed.~~

SECTION 4 Monitoring and Reporting Requirements

The owner or operator shall conduct such monitoring of operations and submit records as specified by the District.

SECTION 5 Compliance

5.1 The design of the vapor control system is subject to the approval of the District.

5.2 Methods specified by the District shall be used to determine compliance with section 3, except as required in sections 5.3 and 5.4.

5.3 The test procedure, as defined in "Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals," EPA-450/2-77-026, (OAQPS No. 1.2-082) Appendix A shall be used to determine compliance with section 3.6. Each bulk gasoline terminal subject to this regulation shall use leak tight tank trucks for the compliance test. For purposes of testing using Appendix A, a leak-tight tank truck is one that during loading has no reading greater than or equal to 100% of the lower explosive limit (LEL, measured as propane), at a distance of 2.5 centimeters (one inch) from the potential leak source associated with the gasoline tank truck or trailer and its vapor collection system, as detected by a combustible gas detector using the test procedure in section 5.4.

5.4 The test procedure, as defined in "Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems (OAQPS 1.2-119) Appendix B, or an equivalent procedure approved by the District, shall be used to determine compliance with section 3.6.3 during inspections conducted pursuant to KRS 77.165 or KRS 224.10-100 (10) and with the requirements of section 5.3.

SECTION 6 Compliance Timetable

6.1 The owner or operator of an affected facility shall be required to complete the following:

6.1.1 Submit a final control plan for achieving compliance with this regulation by September 1, 1979;

6.1.2 Award the control system contract by January 1, 1980;

6.1.3 Initiate on-site construction or installation of emission control equipment by July 1, 1980;

6.1.4 Complete on-site construction or installation of emission control equipment by March 1, 1981; and

6.1.5 Achieve final compliance by May 1, 1981.

6.2 The owner or operator of an affected facility shall achieve final compliance with section 3.6 by April 1, 1983.

Adopted v1/6-13-79~~;~~, effective 6-13-79; amended v2/11-16-83, v3/06-19-19.

REGULATION 6.31 Standard of Performance for Existing Miscellaneous Metal Parts and Products Surface Coating Operations

Air Pollution Control District of Jefferson County
Jefferson County, Kentucky

Relates To: KRS Chapter 77 Air Pollution Control
Pursuant To: KRS Chapter 77 Air Pollution Control
Necessity and Function: KRS 77.180 provides that the Air Pollution Control Board may make and enforce all needful orders, rules, and regulations necessary or proper to accomplish the purposes of KRS Chapter 77. This regulation provides for the control of volatile organic compound emissions from existing miscellaneous metal parts and products surface coating operations.

SECTION 1 Applicability
This regulation applies to each affected facility that was in being or commenced construction, modification, or reconstruction before May 20, 1981. Any affected facility that is ever subject to this regulation will always be subject to it unless the affected facility changes its process to one not covered by this regulation.

SECTION 2 Definitions
Terms used in this regulation not defined herein shall have the meaning given to them in Regulation 1.02.

2.1 "Affected facility" means a coating line located at job shops and original equipment manufacturing industries that applies coatings on a metal substrate not elsewhere subject to regulation in this chapter.

2.2 "Air-dried coating" means a coating that is dried by the use of air or forced warm air at temperatures up to 90^{o}C (194^{o}F).

2.3 "Applicator" means the mechanism or device used to apply the coating, including, but not limited to, dipping, spraying, or flow-coating.

2.4 "Clear Coating" means a coating which either lacks color or opacity, or which is transparent and uses the surface to which it is applied as a reflectant base or undertone color.

2.5 "Coating line" means a series of one or more coating applicators and any associated flashoff area, drying area, or oven wherein a coating is applied and subsequently dried or cured. A coating line ends with the end of the drying or curing area or prior to the beginning of the application of the next coating. It is not necessary to have an oven or a flashoff area in order to be included in this definition. This shall include, but is not limited to:

2.5.1 Mixing operations,

2.5.2 Process storage,

2.5.3 Applicators,
2.5.4 Drying operations including, but not limited to, flashoff area evaporation, oven drying, baking, curing, and polymerization,
2.5.5 Clean up operations,
2.5.6 Leaks, spills, and disposal of VOCs , and
2.5.7 Processing and handling of recovered VOCs .

2.6 "Extreme performance coating" means a coating that is designed to protect a coated part from outdoor or harsh exposure or extreme environmental conditions and that is applied to a part that, in its use as a finished product, is intended to be subjected to outdoor or harsh exposure or extreme environmental conditions.

2.7 "Flashoff area" means the space between the applicator and the oven.

2.8 "Miscellaneous metal parts and products" means items including, but not limited to:

2.8.1 Large farm machinery (harvesting, fertilizing, and planting machines, tractors, combines, etc.),
2.8.2 Small farm machinery (lawn and garden tractors, lawn mowers, rototillers, etc.),
2.8.3 Small appliances (fans, mixers, blenders, crock pots, dehumidifiers, vacuum cleaners, etc.),
2.8.4 Commercial machinery (computers and auxiliary equipment, typewriters, calculators, vending machines, etc.),
2.8.5 Industrial machinery (pumps, compressors, conveyor components, fans, blowers, transformers, etc.),
2.8.6 Fabricated metal products (metal covered doors, frames, etc.), and
2.8.7 Any other industrial category which coats metal parts or products under the Standard Industrial Classification Code of Major Group 33 (primary metal industries), Major Group 34 (fabricated metal products), Major Group 35 (nonelectric machinery), Major Group 36 (electrical machinery), Major Group 37 (transportation equipment), Major Group 38 (miscellaneous instruments), or Major Group 39 (miscellaneous manufacturing industries).

2.9 "Outdoor or harsh exposure or extreme environmental conditions" means exposure to any of the following: year round weather conditions, temperatures consistently above 95^{o}C, detergents, scouring solvents, corrosive atmospheres, and similar environmental conditions.

2.10 "Prime coat" means the first of two or more films of coating applied in an operation.

2.11 "Process storage" means mixing tanks, holding tanks, and other tanks, drums, or other containers that contain surface coatings, volatile organic compounds, or recovered volatile organic compounds, but does not mean storage tanks that are subject to Regulation 6.13 or 7.12.

2.12 "Single coat" means only one film of coating is applied to the metal substrate.

2.13 "Topcoat" means the final film or series of films of coating applied in a two coat (or more) operation.

SECTION 3 Standards for Volatile Organic Compounds

3.1 A person shall not cause or allow the emission of VOC from any affected facility resulting from the coating of metallic surfaces in excess of the applicable emission rate as follows:

3.1.1 0.52 kg of VOC/l (4.3 lb of VOC/gal) of coating, excluding water and exempt solvents, as applied for clear coatings,

3.1.2 0.42 kg of VOC/l (3.5 lb of VOC/gal) of coating, excluding water and exempt solvents, as applied for air-dried coatings,

3.1.3 0.42 kg of VOC/l (3.5 lb of VOC/gal) of coating, excluding water and exempt solvents, as applied for extreme performance coatings, or

3.1.4 0.36 kg of VOC/l (3.0 lb of VOC/gal) of coating, excluding water and exempt solvents, as applied for all other coatings.

3.2 Compliance with the emission limits specified in section 3.1 shall be based upon the coatings used for the affected facility during a calendar-day averaging period. The District may specifically authorize compliance to be based upon a longer averaging period that shall not exceed 1 calendar month.

3.3 If more than 1 limit of section 3.1 would be applicable for a specific coating, the least stringent limit shall apply.

3.4 Upon written request by the owner or operator of the affected facility, and approval by the District, the emission limits specified in section 3.1 may be achieved by an equivalent emission limit expressed in kg of VOC/l (lb of VOC/gal) of coating solids, as applied. The equivalent emission limit shall be established by the following equation:

$$A = \frac{E}{S}$$

where:

A = Allowable equivalent emission limit, in kg of VOC/l (lb of VOC/gal) of coating solids, as applied.

E = Applicable emission limit as specified in section 3.1, in kg of VOC/l (lb of VOC/gal) of coating, excluding water and exempt solvent, as applied.

S = Solids volume fraction representative of a compliance coating, in liter (gallon) of solids per liter (gallon) of coating, excluding water and exempt solvents, as applied. The value of "S" shall be determined by using one of the following equations:

$$S = 1 - \frac{E}{0.88} \; Where\ E\ is\ in\ kg\ of\ VOC\ /\ l$$

$$S = 1 - \frac{E}{7.36} \; Where\ E\ is\ in\ lb\ of\ VOC\ /\ gal$$

SECTION 4 Compliance

4.1 In all cases, the design of any control system is subject to approval by the District.

4.2 Compliance with an emission limit in section 3.4 shall be demonstrated by a material balance except in those cases where the District determines that a material balance is not possible. For those cases where a material balance is not possible, compliance will be determined based upon an engineering analysis by the District of the control system design, control device efficiency, control system capture efficiency, and any other factors that could influence the performance of the system. If so requested by the District, performance tests as specified by the District shall be conducted in order to determine the efficiency of the control device. The control system capture efficiency shall be measured according to methods specified in Regulation 1.05.

4.3 Whenever deemed necessary by the District, the District shall obtain samples of the coatings used at an affected facility to verify compliance with Section 3.

4.3.1 The method of analysis for coatings is EPA Method 24.

4.4 For each coating line that applies multiple coatings, all of which are subject to the same numerical emission limitation in section 3.1, during the same averaging period, e.g., all coatings used on the line are subject to 0.42 kg of VOC/l (3.5 lb of VOC/gal) of coating, excluding water and exempt solvents, the daily weighted VOC content, calculated in accordance with the procedure in section 4.4.1, shall not exceed the coating VOC content limit corresponding to the category of coating used.

4.4.1 The averaging period weighted average VOC content, which means the VOC content of two or more coatings as applied on a coating line during any averaging period and weighted according to the fraction of the total coating volume that each coating represents, shall be calculated using the following equation:

$$VOC_w = \sum_{i=1}^{n} \frac{V_i C_i}{VT}$$

where:

VOC_w = The average VOC content of two or more coatings as applied each averaging period on a coating line, in kg VOC/l (lb of VOC/gal) of coating, excluding water and exempt solvents.

V_i = The volume of each coating as applied each averaging period on a coating line in units of liters (gallons), excluding water and exempt solvents.

C_i = The VOC content of each coating as applied each averaging period on a coating line in units of kg of VOC/l (lb of VOC/gal) of coating, excluding water and exempt solvents.

VT = The total volume of all coatings as applied each averaging period on a coating line in units of liters (gallons), excluding water and exempt solvents.

n = The number of different coatings as applied each averaging period on a coating line.

SECTION 5 Exemptions

5.1 The surface coating of the following metal parts and products, or operations, are exempt from the standards in section 3 of this regulation:

5.1.1 The exterior of airplanes and marine vessels, but not parts for the exterior of airplanes and marine vessels that are coated as a separate manufacturing or coating operation,

5.1.2 Automobile refinishing,

5.1.3 Customized top coating of automobiles and trucks if production is less than 35 vehicles per day,

5.1.4 Metallic surfaces that are subject to Regulation 6.16, 6.17, 6.19, 7.02 or 7.55, and

5.1.5 Parts consisting of both metallic and nonmetallic components, if a demonstration is made, to the satisfaction of the District, that the limits of this rule cannot be met due to the presence of the nonmetallic component. In this case, Section 4 *RACT Determination Procedure* of Regulation 6.42, notwithstanding the applicability provisions of Section 1 of Regulation 6.42, applies to the coating of these parts.

5.2 Any affected facility shall be exempt from Section 3 if the total VOC emissions from all affected facilities subject to this regulation are less than or equal to five tons per year (potential emissions prior to any add-on controls).

SECTION 6 Recordkeeping

6.1 An owner or operator of an affected facility subject to this regulation shall maintain records of operations for each averaging period for the most recent two-year period. The records shall be made available to the District upon request. The records shall include, but not be limited to, the following:

6.1.1 The regulation and section number applicable to the affected facility for which the records are being maintained,

6.1.2 The application method and substrate type (metal, plastic, etc.),

6.1.3 The amount and type of coatings (including catalyst and reducer for multicomponent coatings) and solvent (including exempt compounds) used at each point of application during the averaging period. The District may specifically authorize the usage record to reflect a period longer than the compliance averaging period, with the usage prorated for each compliance averaging period by a method approved by the District. In this case, the usage record period shall not exceed 1 calendar month,

6.1.4 The VOC content as applied in each coating and solvent,

6.1.5 The date, or usage record period, for each application of coating and solvent,

6.1.6 The amount of surface preparation, clean-up, wash-up of solvent (including exempt compounds) used and the VOC content of each material used during the averaging period. The District may specifically authorize the usage record to reflect a period longer than the compliance averaging period, with the usage prorated for each

compliance averaging period by a method approved by the District. In this case, the usage record period shall not exceed 1 calendar month, and

6.1.7 Oven temperature, where applicable.

6.2 The VOC content shall be calculated using a percent solids basis (excluding water and exempt solvents) for coatings using EPA Method 24.

6.3 When an affected facility utilizes add-on controls to achieve compliance, documentation will be necessary to assure proper operation. Examples of some controls and related information are:

6.3.1 Thermal incineration: combustion temperature, inlet and outlet VOC concentration from emission tests, how and when these concentrations were determined, destruction or removal efficiency, and manufacturer data.

6.3.2 Catalytic incineration: exhaust gas temperature, change in temperature across catalyst bed, date of last change of catalyst bed, inlet and outlet VOC concentration from emission test, how and when these concentrations were determined, destruction or removal efficiency, and manufacturer data.

6.3.3 Condenser: inlet temperature of cooling medium, outlet temperature of cooling medium, inlet and outlet VOC concentration from emission tests, how and when these concentrations were determined, removal efficiency, and manufacturer data.

6.4 When an affected facility utilizes add-on controls, compliance shall be determined by using EPA Method 25.

6.5 In lieu of the records required by sections 6.1 through 6.4 above, any facility claiming an exemption pursuant to Section 5 shall keep records sufficient to demonstrate applicability of the claimed exemption. For facilities exempt pursuant to section 5.2, this shall include but not be limited to record of the total potential VOC emissions from all processes or process operations subject to this regulation prior to any add-on controls on a rolling twelve month basis.

SECTION 7 Deviations

Deviations from the standards and limitations in this regulation, when supported by adequate technical information, will be considered by the District on a case-by-case basis to allow for technological or economic circumstances that are unique to an affected facility . However, these deviations will require federal approval pursuant to Regulation 1.08.

Adopted v1/5-20-81; effective 5-20-81; amended v2/4-21-82, v3/2-19-86, v4/5-15-91, v5/4-23-96, v6/01-17-18, v7/06-19-19.

REGULATION 6.31 Standard of Performance for Existing Miscellaneous Metal Parts and Products Surface Coating Operations

Air Pollution Control District of Jefferson County
Jefferson County, Kentucky

Relates To: KRS Chapter 77 Air Pollution Control
Pursuant To: KRS Chapter 77 Air Pollution Control
Necessity and Function: KRS 77.180 provides that the Air Pollution Control Board may make and enforce all needful orders, rules, and regulations necessary or proper to accomplish the purposes of KRS Chapter 77. This regulation provides for the control of volatile organic compound emissions from existing miscellaneous metal parts and products surface coating operations.

SECTION 1 Applicability
This regulation applies to each affected facility that was in being or commenced construction, modification, or reconstruction before May 20, 1981. Any affected facility that is ever subject to this regulation will always be subject to it unless the affected facility changes its process to one not covered by this regulation.

SECTION 2 Definitions
Terms used in this regulation not defined herein shall have the meaning given to them in Regulation 1.02.

2.1 "Affected facility" means a coating line located at job shops and original equipment manufacturing industries that applies coatings on a metal substrate not elsewhere subject to regulation in this chapter.

2.2 "Air-dried coating" means a coating that is dried by the use of air or forced warm air at temperatures up to 90°C (194°F).

2.3 "Applicator" means the mechanism or device used to apply the coating, including, but not limited to, dipping, spraying, or flow-coating.

2.4 "Clear Coating" means a coating which either lacks color or opacity, or which is transparent and uses the surface to which it is applied as a reflectant base or undertone color.

2.5 "Coating line" means a series of one or more coating applicators and any associated flashoff area, drying area, or oven wherein a coating is applied and subsequently dried or cured. A coating line ends with the end of the drying or curing area or prior to the beginning of the application of the next coating. It is not necessary to have an oven or a flashoff area in order to be included in this definition. This shall include, but is not limited to:

2.5.1 Mixing operations,

2.5.2 Process storage,

2.5.3 Applicators,
2.5.4 Drying operations including, but not limited to, flashoff area evaporation, oven drying, baking, curing, and polymerization,
2.5.5 Clean up operations,
2.5.6 Leaks, spills, and disposal of VOCs , and
2.5.7 Processing and handling of recovered VOCs .

2.6 "Extreme performance coating" means a coating that is designed to protect a coated part from outdoor or harsh exposure or extreme environmental conditions and that is applied to a part that, in its use as a finished product, is intended to be subjected to outdoor or harsh exposure or extreme environmental conditions.

2.7 "Flashoff area" means the space between the applicator and the oven.

2.8 "Miscellaneous metal parts and products" means items including, but not limited to:
2.8.1 Large farm machinery (harvesting, fertilizing, and planting machines, tractors, combines, etc.),
2.8.2 Small farm machinery (lawn and garden tractors, lawn mowers, rototillers, etc.),
2.8.3 Small appliances (fans, mixers, blenders, crock pots, dehumidifiers, vacuum cleaners, etc.),
2.8.4 Commercial machinery (computers and auxiliary equipment, typewriters, calculators, vending machines, etc.),
2.8.5 Industrial machinery (pumps, compressors, conveyor components, fans, blowers, transformers, etc.),
2.8.6 Fabricated metal products (metal covered doors, frames, etc.), and
2.8.7 Any other industrial category which coats metal parts or products under the Standard Industrial Classification Code of Major Group 33 (primary metal industries), Major Group 34 (fabricated metal products), Major Group 35 (nonelectric machinery), Major Group 36 (electrical machinery), Major Group 37 (transportation equipment), Major Group 38 (miscellaneous instruments), or Major Group 39 (miscellaneous manufacturing industries).

2.9 "Outdoor or harsh exposure or extreme environmental conditions" means exposure to any of the following: year round weather conditions, temperatures consistently above 95^{o}C, detergents, scouring solvents, corrosive atmospheres, and similar environmental conditions.

2.10 "Prime coat" means the first of two or more films of coating applied in an operation.

2.11 "Process storage" means mixing tanks, holding tanks, and other tanks, drums, or other containers that contain surface coatings, volatile organic compounds, or recovered volatile organic compounds, but does not mean storage tanks that are subject to Regulation 6.13 or 7.12.

2.12 "Single coat" means only one film of coating is applied to the metal substrate.

2.13 "Topcoat" means the final film or series of films of coating applied in a two coat (or more) operation.

SECTION 3 Standards for Volatile Organic Compounds

3.1 A person shall not cause or allow the emission of VOC from any affected facility resulting from the coating of metallic surfaces in excess of the applicable emission rate as follows:

3.1.1 0.52 kg of VOC/l (4.3 lb of VOC/gal) of coating, excluding water and exempt solvents, as applied for clear coatings,

3.1.2 0.42 kg of VOC/l (3.5 lb of VOC/gal) of coating, excluding water and exempt solvents, as applied for air-dried coatings,

3.1.3 0.42 kg of VOC/l (3.5 lb of VOC/gal) of coating, excluding water and exempt solvents, as applied for extreme performance coatings, or

3.1.4 0.36 kg of VOC/l (3.0 lb of VOC/gal) of coating, excluding water and exempt solvents, as applied for all other coatings.

3.2 Compliance with the emission limits specified in section 3.1 shall be based upon the coatings used for the affected facility during a calendar-day averaging period. The District may specifically authorize compliance to be based upon a longer averaging period that shall not exceed 1 calendar month.

3.3 If more than 1 limit of section 3.1 would be applicable for a specific coating, the least stringent limit shall apply.

3.4 Upon written request by the owner or operator of the affected facility, and approval by the District, the emission limits specified in section 3.1 may be achieved by an equivalent emission limit expressed in kg of VOC/l (lb of VOC/gal) of coating solids, as applied. The equivalent emission limit shall be established by the following equation:

$$A = \frac{E}{S}$$

where:

A = Allowable equivalent emission limit, in kg of VOC/l (lb of VOC/gal) of coating solids, as applied.

E = Applicable emission limit as specified in section 3.1, in kg of VOC/l (lb of VOC/gal) of coating, excluding water and exempt solvent, as applied.

S = Solids volume fraction representative of a compliance coating, in liter (gallon) of solids per liter (gallon) of coating, excluding water and exempt solvents, as applied. The value of "S" shall be determined by using one of the following equations:

$$S = 1 - \frac{E}{0.88} \; Where\ E\ is\ in\ kg\ of\ VOC\ /\ l$$

$$S = 1 - \frac{E}{7.36} \; Where\ E\ is\ in\ lb\ of\ VOC\ /\ gal$$

SECTION 4 Compliance

4.1 In all cases, the design of any control system is subject to approval by the District.

4.2 Compliance with an emission limit in section 3.4 shall be demonstrated by a material balance except in those cases where the District determines that a material balance is not possible. For those cases where a material balance is not possible, compliance will be determined based upon an engineering analysis by the District of the control system design, control device efficiency, control system capture efficiency, and any other factors that could influence the performance of the system. If so requested by the District, performance tests as specified by the District shall be conducted in order to determine the efficiency of the control device. The control system capture efficiency shall be measured according to methods specified in Regulation 1.05.

4.3 Whenever deemed necessary by the District, the District shall obtain samples of the coatings used at an affected facility to verify compliance with Section 3.

4.3.1 The method of analysis for coatings is EPA Method 24.

4.4 For each coating line that applies multiple coatings, all of which are subject to the same numerical emission limitation in section 3.1, during the same averaging period, e.g., all coatings used on the line are subject to 0.42 kg of VOC/l (3.5 lb of VOC/gal) of coating, excluding water and exempt solvents, the daily weighted VOC content, calculated in accordance with the procedure in section 4.4.1, shall not exceed the coating VOC content limit corresponding to the category of coating used.

4.4.1 The averaging period weighted average VOC content, which means the VOC content of two or more coatings as applied on a coating line during any averaging period and weighted according to the fraction of the total coating volume that each coating represents, shall be calculated using the following equation:

$$VOC_w = \sum_{i=1}^{n} \frac{V_i C_i}{VT}$$

where:

VOC_w = The average VOC content of two or more coatings as applied each averaging period on a coating line, in kg VOC/l (lb of VOC/gal) of coating, excluding water and exempt solvents.

V_i = The volume of each coating as applied each averaging period on a coating line in units of liters (gallons), excluding water and exempt solvents.

C_i = The VOC content of each coating as applied each averaging period on a coating line in units of kg of VOC/l (lb of VOC/gal) of coating, excluding water and exempt solvents.

VT = The total volume of all coatings as applied each averaging period on a coating line in units of liters (gallons), excluding water and exempt solvents.

n = The number of different coatings as applied each averaging period on a coating line.

SECTION 5 Exemptions

5.1 The surface coating of the following metal parts and products, or operations, are exempt from th~~is~~e standards in section 3 of this regulation:

5.1.1 The exterior of airplanes and marine vessels, but not parts for the exterior of airplanes and marine vessels that are coated as a separate manufacturing or coating operation,

5.1.2 Automobile refinishing,

5.1.3 Customized top coating of automobiles and trucks if production is less than 35 vehicles per day,

5.1.4 Metallic surfaces that are subject to Regulation 6.16, 6.17, 6.19, 7.02 or 7.55, and

5.1.5 Parts consisting of both metallic and nonmetallic components, if a demonstration is made, to the satisfaction of the District, that the limits of this rule cannot be met due to the presence of the nonmetallic component. In this case, Section 4 *RACT Determination Procedure* of Regulation 6.42, notwithstanding the applicability provisions of Section 1 of Regulation 6.42, applies to the coating of these parts.

5.2 Any affected facility shall be exempt from Section 3 if the total VOC emissions from all affected facilities subject to this regulation are less than or equal to five tons per year (potential emissions prior to any add-on controls).

SECTION 6 Recordkeeping

6.1 An owner or operator of an affected facility subject to this regulation shall maintain records of operations for each averaging period for the most recent two-year period. The records shall be made available to the District upon request. The records shall include, but not be limited to, the following:

6.1.1 The regulation and section number applicable to the affected facility for which the records are being maintained,

6.1.2 The application method and substrate type (metal, plastic, etc.),

6.1.3 The amount and type of coatings (including catalyst and reducer for multicomponent coatings) and solvent (including exempt compounds) used at each point of application during the averaging period. The District may specifically authorize the usage record to reflect a period longer than the compliance averaging period, with the usage prorated for each compliance averaging period by a method approved by the District. In this case, the usage record period shall not exceed 1 calendar month,

6.1.4 The VOC content as applied in each coating and solvent,

6.1.5 The date, or usage record period, for each application of coating and solvent,

6.1.6 The amount of surface preparation, clean-up, wash-up of solvent (including exempt compounds) used and the VOC content of each material used during the averaging period. The District may specifically authorize the usage record to reflect a period longer than the compliance averaging period, with the usage prorated for each

compliance averaging period by a method approved by the District. In this case, the usage record period shall not exceed 1 calendar month, and

6.1.7 Oven temperature, where applicable.

6.2 The VOC content shall be calculated using a percent solids basis (excluding water and exempt solvents) for coatings using EPA Method 24.

6.3 When an affected facility utilizes add-on controls to achieve compliance, documentation will be necessary to assure proper operation. Examples of some controls and related information are:

6.3.1 Thermal incineration: combustion temperature, inlet and outlet VOC concentration from emission tests, how and when these concentrations were determined, destruction or removal efficiency, and manufacturer data.

6.3.2 Catalytic incineration: exhaust gas temperature, change in temperature across catalyst bed, date of last change of catalyst bed, inlet and outlet VOC concentration from emission test, how and when these concentrations were determined, destruction or removal efficiency, and manufacturer data.

6.3.3 Condenser: inlet temperature of cooling medium, outlet temperature of cooling medium, inlet and outlet VOC concentration from emission tests, how and when these concentrations were determined, removal efficiency, and manufacturer data.

6.4 When an affected facility utilizes add-on controls, compliance shall be determined by using EPA Method 25.

6.5 In lieu of the records required by sections 6.1 through 6.4 above, any facility claiming an exemption pursuant to Section 5 shall keep records sufficient to demonstrate applicability of the claimed exemption. For facilities exempt pursuant to section 5.2, this shall include but not be limited to record of the total potential VOC emissions from all processes or process operations subject to this regulation prior to any add-on controls on a rolling twelve month basis.

SECTION 7 Deviations

Deviations from the standards and limitations in this regulation, when supported by adequate technical information, will be considered by the District on a case-by-case basis to allow for technological or economic circumstances that are unique to an affected facility . However, these deviations will require federal approval pursuant to Regulation 1.08.

Adopted v1/5-20-81; effective 5-20-81; amended v2/4-21-82, v3/2-19-86, v4/5-15-91, v5/4-23-96, v6/01-17-18, v7/06-19-19.

REGULATION 7.02 Adoption and Incorporation by Reference of Federal New Source Performance Standards

Air Pollution Control District of Jefferson County
Jefferson County, Kentucky

Relates To: KRS Chapter 77 Air Pollution Control
Pursuant To: KRS Chapter 77 Air Pollution Control
Necessity and Function: KRS 77.180 authorizes the Air Pollution Control Board to adopt and enforce all orders, rules, and regulations necessary or proper to accomplish the purposes of KRS Chapter 77. This regulation incorporates by reference certain federal Standards of Performance for New Stationary Sources in 40 CFR Part 60.

SECTION 1 General Definition

In the federal regulations adopted and incorporated by reference in this regulation, "Regional Administrator", "EPA", and "Agency" shall be read as "District" and "this subpart" shall be read as "this regulation", unless otherwise specified.

SECTION 2 Adopted and Incorporated Subpart and Appendix Version Dates

The version of the *Code of Federal Regulations (*CFR) subparts and appendices adopted and incorporated by reference in this regulation is specified in Regulation 1.15, *Version of Federal Regulations Adopted and Incorporated by Reference* in effect as of the effective date of this regulation.

SECTION 3 Adoption and Incorporation by Reference of 40 CFR Part 60 *Standards of Performance for New Stationary Sources*

The following EPA regulations and all associated appendices are hereby adopted and incorporated by reference:

Subpart	40 CFR Part 60 Regulation/Regulated Source or Facility
A	General Provisions
Cf	Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills
D	Standards of Performance for Fossil-Fuel Fired Steam Generators for Which Construction is Commenced After August 17, 1971
Da	Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978
Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units
Dc	Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units

Subpart	40 CFR Part 60 Regulation/Regulated Source or Facility
E	Standards of Performance for Incinerators
Ea	Standards of Performance for Municipal Waste Combustors for Which Construction is Commenced After December 20, 1989, and On or Before September 20, 1994
Eb	Standards of Performance for Large Municipal Waste Combustors for Which Construction is Commenced After September 20, 1994, or for Which Modification or Reconstruction is Commenced After June 19, 1996
Ec	Standards of Performance for Hospital / Medical / Infectious Waste Incinerators for Which Construction Is Commenced After June 20, 1996
F	Standards of Performance for Portland Cement Plants
G	Standards of Performance for Nitric Acid Plants
H	Standards of Performance for Sulfuric Acid Plants
I	Standards of Performance for Hot Mix Asphalt Facilities
J	Standards of Performance for Petroleum Refineries
Ja	Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007
K	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978
Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984
Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984
L	Standards of Performance for Secondary Lead Smelters
M	Standards of Performance for Secondary Brass and Bronze Production Plants
N	Standards of Performance for Primary Emissions From Basic Oxygen Process Furnaces for Which Construction is Commenced After June 11, 1973
Na	Standards of Performance for Secondary Emissions From Basic Oxygen Process Steelmaking Facilities for Which Construction is Commenced After January 20,

Subpart	40 CFR Part 60 Regulation/Regulated Source or Facility
	1983
O	Standards of Performance for Sewage Treatment Plants
P	Standards of Performance for Primary Copper Smelters
Q	Standards of Performance for Primary Zinc Smelters
R	Standards of Performance for Primary Lead Smelters
S	Standards of Performance for Primary Aluminum Reduction Plants
T	Standards of Performance for the Phosphate Fertilizer Industry: Wet-Process Phosphoric Acid Plants
U	Standards of Performance for the Phosphate Fertilizer Industry: Superphosphoric Acid Plants
V	Standards of Performance for the Phosphate Fertilizer Industry: Diammonium Phosphate Plants
W	Standards of Performance for the Phosphate Fertilizer Industry: Triple Superphosphate Plants
X	Standards of Performance for the Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities
Y	Standards of Performance for Coal Preparation Plants
Z	Standards of Performance for Ferroalloy Production Facilities
AA	Standards of Performance for Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974, and On or Before August 17, 1983
AAa	Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 17, 1983
BB	Standards of Performance for Kraft Pulp Mills
CC	Standards of Performance for Glass Manufacturing Plants
DD	Standards of Performance for Grain Elevators
EE	Standards of Performance for Surface Coating of Metal Furniture
GG	Standards of Performance for Stationary Gas Turbines
HH	Standards of Performance for Lime Manufacturing Plants
KK	Standards of Performance for Lead-Acid Battery Manufacturing Plants
LL	Standards of Performance for Metallic Mineral Processing Plants
MM	Standards of Performance for Automobile and

Subpart	40 CFR Part 60 Regulation/Regulated Source or Facility
	Light-Duty Truck Surface Coating Operations
NN	Standards of Performance for Phosphate Rock Plants
PP	Standards of Performance for Ammonium Sulfate Manufacture
QQ	Standards of Performance for the Graphic Arts Industry: Publication Rotogravure Printing
RR	Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations
SS	Standards of Performance for Industrial Surface Coating: Large Appliances
TT	Standards of Performance for Metal Coil Surface Coating
UU	Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture
VV	Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry
VVa	Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006
WW	Standards of Performance for the Beverage Can Surface Coating Industry
XX	Standards of Performance for Bulk Gasoline Terminals
BBB	Standards of Performance for the Rubber Tire Manufacturing Industry
DDD	Standards of Performance for Volatile Organic Compound (VOC) Emissions From the Polymer Manufacturing Industry
FFF	Standards of Performance for Flexible Vinyl and Urethane Coating and Printing
GGG	Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries
GGGa	Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006
HHH	Standards of Performance for Synthetic Fiber Production Facilities
III	Standards of Performance for Volatile Organic Compound (VOC) Emissions From the Synthetic

Subpart	**40 CFR Part 60** **Regulation/Regulated Source or Facility**
	Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes
JJJ	Standards of Performance for Petroleum Dry Cleaners
KKK	Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plants
LLL	Standards of Performance for Onshore Natural Gas Processing: SO_2 Emissions
NNN	Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations
OOO	Standards of Performance for Nonmetallic Mineral Processing Plants
PPP	Standard of Performance for Wool Fiberglass Insulation Manufacturing Plants
QQQ	Standards of Performance for VOC Emissions From Petroleum Refinery Wastewater Systems
RRR	Standards of Performance for Volatile Organic Compound Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Process
SSS	Standards of Performance for Magnetic Tape Coating Facilities
TTT	Standards of Performance for Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines
UUU	Standards of Performance for Calciners and Dryers in Mineral Industries
VVV	Standards of Performance for Polymeric Coating of Supporting Substrates Facilities
WWW	Standards of Performance for Municipal Solid Waste Landfills
AAAA	Standards of Performance for Small Municipal Waste Combustion Units for Which Construction is Commenced After August 30, 1999, or for Which Modification or Reconstruction is Commenced After June 6, 2001
CCCC	Standards of Performance for Commercial and Industrial Solid Waste Incineration Units for Which Construction Commenced After November 30, 1999, or for Which Modification or Reconstruction Is Commenced on or After June 1, 2001

Subpart	40 CFR Part 60 Regulation/Regulated Source or Facility
EEEE	Standards of Performance for Other Solid Waste Incineration Units for Which Construction Is Commenced After December 9, 2004, or for Which Modification or Reconstruction Is Commenced on or After June 16, 2006
IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
KKKK	Standards of Performance for Stationary Combustion Turbines
LLLL	Standards of Performance for New Sewage Sludge Incineration Units
OOOO	Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution

40 CFR 60 Appendices

Appendix	Appendix Title
A	Test Methods
B	Performance Specifications
C	Determination of Emission Rate Change
D	Required Emission Inventory Information
F	Quality Assurance Procedures
I	Removable Label and Owner's Manual

SECTION 4 Availability

Copies of the *Code of Federal Regulations* (CFR) and the *Federal Register* (FR) are available:

4.1 For sale from:

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Superintendent of Documents
Mail Stop SSOP
Washington, DC 20402-9328

4.2 For free by downloading from the Internet:

http://www.gpo.gov/fdsys/

SECTION 5 Additional Applicable Requirements

In addition to complying with the EPA regulations listed in Section 3, newly constructed, reconstructed, or modified processes and process equipment and affected facilities shall comply with any other more stringent applicable requirements in District regulations.

Adopted v1/4-20-88 effective 4-20-88; amended v2/9-15-93, v3/12-21-94, v4/3-19-97, v5/4-15-98, v6/7-21-99, v7/3-15-00, v8/6-20-01, v9/2-20-02, v10/2-19-03, v11/3-17-04, v12/9-21-05, v13/3-15-06, v14/2-20-08, v15/4-20-11, v16/5-16-12, v17/10-21-15, v18/06-19-19.

REGULATION 7.02 Adoption and Incorporation by Reference of Federal New Source Performance Standards

Air Pollution Control District of Jefferson County
Jefferson County, Kentucky

Relates To: KRS Chapter 77 Air Pollution Control
Pursuant To: KRS Chapter 77 Air Pollution Control
Necessity and Function: KRS 77.180 authorizes the Air Pollution Control Board to adopt and enforce all orders, rules, and regulations necessary or proper to accomplish the purposes of KRS Chapter 77. This regulation incorporates by reference certain federal Standards of Performance for New Stationary Sources in 40 CFR Part 60.

SECTION 1 General Definition
In the federal regulations adopted and incorporated by reference in this regulation, "Regional Administrator", "EPA", and "Agency" shall be read as "District" and "this subpart" shall be read as "this regulation", unless otherwise specified.

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SECTION 3 Adoption and Incorporation by Reference of 40 CFR Part 60 *Standards of Performance for New Stationary Sources*
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http://www.gpo.gov/fdsys/

SECTION 5 Additional Applicable Requirements

In addition to complying with the EPA regulations listed in Section 3, newly constructed, reconstructed, or modified processes and process equipment and affected facilities shall comply with any other more stringent applicable requirements in District regulations.

Adopted v1/4-20-88 effective 4-20-88; amended v2/9-15-93, v3/12-21-94, v4/3-19-97, v5/4-15-98, v6/7-21-99, v7/3-15-00, v8/6-20-01, v9/2-20-02, v10/2-19-03, v11/3-17-04,

v12/9-21-05, v13/3-15-06, v14/2-20-08, v15/4-20-11, v16/5-16-12, v17/10-21-15, v18/06-19-19.

REGULATION 7.12 Standard of Performance for New Storage Vessels for Volatile Organic Compounds

Air Pollution Control District of Jefferson County
Jefferson County, Kentucky

Relates To: KRS Chapter 77 Air Pollution Control
Pursuant To: KRS Chapter 77 Air Pollution Control
Necessity and Function: KRS 77.180 provides that the Air Pollution Control Board may make and enforce all needful order, rules, and regulations necessary or proper to accomplish the purposes of KRS Chapter 77. This regulation provides for the control of emissions of volatile organic compounds from new storage vessels.

SECTION 1 Applicability
This regulation applies to each affected facility which means each storage vessel for volatile organic compounds that commences construction, modification, or reconstruction after April 19, 1972, and has a storage capacity greater than 250 gallons and true vapor pressure of the VOCs as stored equal to or greater than 10.4 kPa (1.5 psia). Any source that is ever subject to this regulation will always be subject to it unless the source changes its process to one not covered by this regulation.

SECTION 2 Definitions
Terms used in this regulation not defined herein shall have the meaning given them in Regulation 1.02.

2.1 "External floating roof" means a storage vessel cover in an open top tank consisting of a double deck or pontoon single deck which rests upon and is supported by the volatile organic compound being contained and is equipped with closure seals to close the space between the roof edge and tank shell.

2.2 "Floating roof" means a storage vessel cover consisting of a double deck, pontoon single deck, internal floating cover or covered floating roof, which rests upon and is supported by the volatile organic compound being contained and is equipped with a closure seal or seals to close the space between the roof edge and tank wall.

2.3 "Internal floating roof" means a cover or roof in a fixed roof tank which rests upon or is floated upon the volatile organic compound being contained, and is equipped with closure seals to close the space between the roof edge and tank shell.

2.4 "Liquid-mounted" means a foam or liquid-filled primary seal mounted in contact with the liquid between the tank wall and the floating roof continuously around the circumference of the tank.

2.5 "Metallic shoe seal" includes but is not limited to a metal sheet held vertically against the tank wall by springs or weighted levers and is connected by braces to the floating roof. A

flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

2.6 "Reid vapor pressure" is the absolute vapor pressure of certain volatile organic compounds as determined by methods specified by the District.

2.7 "Seal" means a sliding seal, either a metallic-shoe-type or a nonmetallic resilient-type seal which prevents volatile organic compounds from escaping around the perimeter of the floating roof.

2.8 "Storage vessel" means any tank, reservoir, or container used for the storage of volatile organic compounds, but does not include:

2.8.1 Pressure vessels which are designed to operate in excess of 15 pounds per square inch gauge without emissions to the atmosphere except under emergency conditions.

2.8.2 Subsurface caverns or porous rock reservoirs,

2.8.3 Underground tanks if the total volume of volatile organic compounds added to and taken from a tank annually does not exceed twice the volume of the tank, or

2.8.4 Portable tanks of less than 500 gallons capacity which are used for the temporary storage of a product or intermediate product in a manufacturing process.

2.9 "Submerged fill pipe" means any fill pipe the discharge of which is entirely submerged when the liquid level is 6 inches above the bottom of the tank; or when applied to a tank which is loaded from the side, shall mean every fill pipe the discharge opening of which is entirely submerged when the liquid level is two times the fill pipe diameter above the bottom of the tank.

2.10 "True vapor pressure" means the equilibrium partial pressure exerted by a VOC as determined in accordance with methods described in American Petroleum Institute Bulletin 2517, "Evaporation Loss from Floating Roof Tanks" February 1980.

2.11 "Vapor-mounted" means a foam-filled primary seal mounted continuously around the circumference of the tank so there is an annular vapor space underneath the seal. The annular vapor space is bounded by the bottom of the primary seal, the tank wall, the liquid surface, and the floating roof.

2.12 "Vapor recovery system" means a vapor gathering system capable of collecting all volatile organic compounds discharged from the storage vessel and a vapor disposal system capable of processing such volatile organic compounds so as to prevent their emission to the atmosphere.

SECTION 3 Standard for Volatile Organic Compounds

The owner or operator of any storage vessel to which this regulation applies shall store volatile organic compounds as follows:

3.1 If the storage vessel has a storage capacity greater than 151,400 liters (40,000 gallons) and if the true vapor pressure of the volatile organic compounds as stored, is equal to or greater than 10.4 kPa (1.5 psia) but not greater than 76 kPa (11.0 psia) the storage vessel shall be equipped with a floating roof, a vapor recovery system, or their equivalents.

3.2 If the storage vessel has a storage capacity greater than 151,400 liters (40,000 gallons) and if the true vapor pressure of the volatile organic compounds as stored is greater than 76 kPa (11.0 psia), the storage vessel shall be equipped with a vapor recovery system or its equivalent.

3.3 If the storage vessel has a storage capacity greater than 946.25 liters (250 gallons) but less than 151,400 liters (40,000 gallons), and if the true vapor pressure of the volatile organic compounds, as stored, is equal to or greater than 1.5 psia, as a minimum, it shall be equipped with a permanent submerged fill pipe. True vapor pressure "as stored" shall be determined on an instantaneous basis under conditions representing expected worst case conditions.

3.4 If the storage vessel is an external floating roof tank with a storage capacity greater than 151,400 1iters (40,000 gallons), it shall be retrofitted with a continuous secondary seal extending from the floating roof to the tank wall (a rim-mounted secondary) if:

3.4.1 The tank is a welded tank, the true vapor pressure of the contained liquid is 27.6 kilopascal (4.0 psia) or greater, and the primary seal is one of the following:

3.4.1.1 A metallic-type shoe seal, a liquid-mounted foam seal, or a liquid-mounted liquid-filled type seal, or

3.4.1.2 Any other closure device which can be demonstrated equivalent to the above primary seals.

3.4.2 The tank is a riveted tank and the true vapor pressure of the contained liquid is 10.4 kilopascal (1.5 psia) or greater.

3.4.3 The tank is a welded tank, the true vapor pressure of the contained liquid is 10.4 kilopascal (1.5 psia) or greater and the primary seal is vapor-mounted. If such primary seal closure device can be demonstrated equivalent to the primary seals described in section 3.4.1, then the secondary seal is required when the vapor pressure is 27.6 kilopascal (4.0 psia) or greater.

SECTION 4 Operating Requirements

4.1 There shall be no visible holes, tears, or other openings in the seal or any seal fabric.

4.2 All openings, except stub drains, shall be equipped with covers, lids, or seals such that:

4.2.1 The cover, lid, or seal is in the closed position at all times except when in actual use;

4.2.2 Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports; and

4.2.3 Rim vents, if provided, are set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting.

4.3 External floating roof tanks subject to this regulation shall meet the additional requirements:

4.3.1 The seals must be intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall,

4.3.2 The gap area of gaps exceeding 0.32 cm (1/8 in) in width between the secondary seal installed pursuant to section 3.4.1 and the tank wall shall not exceed 6.5 sq cm/0.3 m of tank diameter (1.0 sq in/ft),

4.3.3 All openings in the external floating roof, except for automatic bleeder vents, rim space, and leg sleeves, are to provide a projection below the liquid surface, and

4.3.4 Any emergency roof drain is to be provided with a slotted membrane fabric cover or equivalent that covers at least 90% of the area of the opening.

SECTION 5 Monitoring of Operations

5.1 When a liquid having a true vapor pressure greater than 10.4 kPa (1.5 psia) is stored in an external floating roof tank with a capacity of greater than 151,400 liters (40,000 gallons) not equipped with a secondary seal or approved alternative control technology, the owner or operator shall maintain a record of the average monthly storage temperature, the type of liquid, and the Reid vapor pressure of the liquid. The owner or operator shall retain the record for two years after the date on which the record was made.

5.2 The true vapor pressure shall be determined by using the average monthly storage temperature and typical Reid vapor pressure of the contained liquid or from typical available data on the contained liquid. Supporting analytical data shall be requested by the District if there is a question on the values reported.

5.3 The owner or operator of a petroleum liquid storage vessel with an external floating roof subject to this regulation shall:

5.3.1 Perform routine inspections semi-annually in order to ensure compliance with Section 4, and the inspections shall include a visual inspection of the secondary seal gap,

5.3.2 Measure the secondary seal gap annually in accordance with Section 4 when the floating roof is equipped with a vapor-mounted primary seal, and

5.3.3 Maintain records of the types of volatile petroleum liquids stored, the maximum true pressure of the liquid, as stored, and the results of the inspections performed in section 5.3.1.

5.4 Compliance provision. Compliance with Section 4 shall be determined by:

5.4.1 Physically measuring the length and width of all gaps around the entire circumference of the secondary seal in each place where a 0.32 cm (1/8 in) uniform diameter probe passes freely (without forcing or binding against the seal) between the seal and tank wall and

5.4.2 Summing the area of the individual gaps.

SECTION 6 Exemptions

Any of the following types of external floating roof tanks storing liquid petroleum shall be exempt from section 3.4 as follows:

6.1 A metallic-type shoe seal in a welded tank which has a secondary seal from the top of the shoe seal to the tank wall (a shoe-mounted secondary),

6.2 External floating roof tanks storing waxy, heavy pour crudes, or
6.3 External floating roof tanks with a closure or other devices which can be demonstrated to the District to be equivalent to the seals required in section 3.4.1.

SECTION 7 Compliance
A new affected facility shall comply with the requirements of this regulation on startup.

SECTION 8 Additional Applicable Regulations
Any source subject to this regulation will also be subject to 40 CFR Part 60 Subpart K adopted by reference in Regulation 7.02.

Adopted v1/7-14-76, effective 7-14-76; amended v2/5-20-81, v3/4-21-82; v4/11-16-83; v5/2-19-86; v6/5-15-91; v7/01-17-18, v8/06-19-19.

REGULATION 7.12 Standard of Performance for New Storage Vessels for Volatile Organic Compounds

Air Pollution Control District of Jefferson County
Jefferson County, Kentucky

Relates To: KRS Chapter 77 Air Pollution Control
Pursuant To: KRS Chapter 77 Air Pollution Control
Necessity and Function: KRS 77.180 provides that the Air Pollution Control Board may make and enforce all needful order, rules, and regulations necessary or proper to accomplish the purposes of KRS Chapter 77. This regulation provides for the control of emissions of volatile organic compounds from new storage vessels.

SECTION 1 Applicability
This regulation applies to each affected facility which means each storage vessel for volatile organic compounds that commences construction, modification, or reconstruction after April 19, 1972, and has a storage capacity greater than 250 gallons and true vapor pressure of the VOCs as stored equal to or greater than ~~78 mm Hg~~10.4 kPa (1.5 psia). Any source that is ever subject to this regulation will always be subject to it unless the source changes its process to one not covered by this regulation.

SECTION 2 Definitions
Terms used in this regulation not defined herein shall have the meaning given them in Regulation 1.02.

2.1 "External floating roof" means a storage vessel cover in an open top tank consisting of a double deck or pontoon single deck which rests upon and is supported by the volatile organic compound being contained and is equipped with closure seals to close the space between the roof edge and tank shell.

2.2 "Floating roof" means a storage vessel cover consisting of a double deck, pontoon single deck, internal floating cover or covered floating roof, which rests upon and is supported by the volatile organic compound being contained and is equipped with a closure seal or seals to close the space between the roof edge and tank wall.

2.3 "Internal floating roof" means a cover or roof in a fixed roof tank which rests upon or is floated upon the volatile organic compound being contained, and is equipped with closure seals to close the space between the roof edge and tank shell.

2.4 "Liquid-mounted" means a foam or liquid-filled primary seal mounted in contact with the liquid between the tank wall and the floating roof continuously around the circumference of the tank.

2.5 "Metallic shoe seal" includes but is not limited to a metal sheet held vertically against the tank wall by springs or weighted levers and is connected by braces to the floating roof. A

flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

2.6 "Reid vapor pressure" is the absolute vapor pressure of certain volatile organic compounds as determined by methods specified by the District.

2.7 "Seal" means a sliding seal, either a metallic-shoe-type or a nonmetallic resilient-type seal which prevents volatile organic compounds from escaping around the perimeter of the floating roof.

2.8 "Storage vessel" means any tank, reservoir, or container used for the storage of volatile organic compounds, but does not include:

2.8.1 Pressure vessels which are designed to operate in excess of 15 pounds per square inch gauge without emissions to the atmosphere except under emergency conditions.

2.8.2 Subsurface caverns or porous rock reservoirs,

2.8.3 Underground tanks if the total volume of ~~VOCs~~volatile organic compounds added to and taken from a tank annually does not exceed twice the volume of the tank, or

2.8.4 Portable tanks of less than 500 gallons capacity which are used for the temporary storage of a product or intermediate product in a manufacturing process.

2.9 "Submerged fill pipe" means any fill pipe the discharge of which is entirely submerged when the liquid level is 6 inches above the bottom of the tank; or when applied to a tank which is loaded from the side, shall mean every fill pipe the discharge opening of which is entirely submerged when the liquid level is two times the fill pipe diameter above the bottom of the tank.

2.10 "True vapor pressure" means the equilibrium partial pressure exerted by a VOC as determined in accordance with methods described in American Petroleum Institute Bulletin 2517, "Evaporation Loss from Floating Roof Tanks" February 1980.

2.11 "Vapor-mounted" means a foam-filled primary seal mounted continuously around the circumference of the tank so there is an annular vapor space underneath the seal. The annular vapor space is bounded by the bottom of the primary seal, the tank wall, the liquid surface, and the floating roof.

2.12 "Vapor recovery system" means a vapor gathering system capable of collecting all ~~VOCs~~volatile organic compounds discharged from the storage vessel and a vapor disposal system capable of processing such ~~VOCs~~volatile organic compounds so as to prevent their emission to the atmosphere.

SECTION 3 Standard for Volatile Organic Compounds

The owner or operator of any storage vessel to which this regulation applies shall store ~~VOCs~~volatile organic compounds as follows:

3.1 If the storage vessel has a storage capacity greater than 151,400 liters (40,000 gallons) and if the true vapor pressure of the ~~VOCs~~volatile organic compounds as stored, is equal to or greater than ~~78 mm Hg~~10.4 kPa (1.5 psia) but not greater than ~~570 mm Hg~~76 kPa (11.~~01~~

psia) the storage vessel shall be equipped with a floating roof, a vapor recovery system, or their equivalents.

3.2 If the storage vessel has a storage capacity greater than 151,400 liters (40,000 gallons) and if the true vapor pressure of the ~~VOCs~~volatile organic compounds as stored is greater than ~~570 mm Hg~~76 kPa (11.0~~1~~ psia), the storage vessel shall be equipped with a vapor recovery system or its equivalent.

3.3 If the storage vessel has a storage capacity greater than 946.25 liters (250 gallons) but less than 151,400 liters (40,000 gallons), and if the true vapor pressure of the ~~VOCs~~volatile organic compounds, as stored, is equal to or greater than 1.5 psia, as a minimum, it shall be equipped with a permanent submerged fill pipe. True vapor pressure "as stored" shall be determined on an instantaneous basis under conditions representing expected worst case conditions.

3.4 If the storage vessel is an external floating roof tank with a storage capacity greater than 151,400 1iters (40,000 gallons), it shall be retrofitted with a continuous secondary seal extending from the floating roof to the tank wall (a rim-mounted secondary) if:

3.4.1 The tank is a welded tank, the true vapor pressure of the contained liquid is 27.6 kilopascal (4.0 psia) or greater, and the primary seal is one of the following:

3.4.1.1 A metallic-type shoe seal, a liquid-mounted foam seal, or a liquid-mounted liquid-filled type seal, or

3.4.1.2 Any other closure device which can be demonstrated equivalent to the above primary seals.

3.4.2 The tank is a riveted tank and the true vapor pressure of the contained liquid is 10.4~~3~~ kilopascal (1.5 psia) or greater.

3.4.3 The tank is a welded tank, the true vapor pressure of the contained liquid is 10.4~~3~~ kilopascal (1.5 psia) or greater and the primary seal is vapor-mounted. If such primary seal closure device can be demonstrated equivalent to the primary seals described in section 3.4.1, then the secondary seal is required when the vapor pressure is 27.6 kilopascal (4.0 psia) or greater.

SECTION 4 Operating Requirements

4.1 There shall be no visible holes, tears, or other openings in the seal or any seal fabric.

4.2 All openings, except stub drains, shall be equipped with covers, lids, or seals such that:

4.2.1 The cover, lid, or seal is in the closed position at all times except when in actual use;

4.2.2 Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports; and

4.2.3 Rim vents, if provided, are set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting.

4.3 External floating roof tanks subject to this regulation shall meet the additional requirements:

4.3.1 The seals must be intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall,

4.3.2 The gap area of gaps exceeding 0.32 cm (1/8 in) in width between the secondary seal installed pursuant to section 3.4.1 and the tank wall shall not exceed 6.5 sq cm/0.3 m of tank diameter (1.0 sq in/ft),

4.3.3 All openings in the external floating roof, except for automatic bleeder vents, rim space, and leg sleeves, are to provide a projection below the liquid surface, and

4.3.4 Any emergency roof drain is to be provided with a slotted membrane fabric cover or equivalent that covers at least 90% of the area of the opening.

SECTION 5 Monitoring of Operations

5.1 When a liquid having a true vapor pressure greater than ~~seven~~ 10.4 kPa (1.5~~0~~ psia) is stored in an external floating roof tank with a capacity of greater than 151,400 liters (40,000 gallons) not equipped with a secondary seal or approved alternative control technology, the owner or operator shall maintain a record of the average monthly storage temperature, the type of liquid, and the Reid vapor pressure of the liquid. The owner or operator shall retain the record for two years after the date on which the record was made.

5.2 The true vapor pressure shall be determined by using the average monthly storage temperature and typical Reid vapor pressure of the contained liquid or from typical available data on the contained liquid. Supporting analytical data shall be requested by the District if there is a question on the values reported.

5.3 The owner or operator of a petroleum liquid storage vessel with an external floating roof subject to this regulation shall:

5.3.1 Perform routine inspections semi-annually in order to ensure compliance with Section 4, and the inspections shall include a visual inspection of the secondary seal gap,

5.3.2 Measure the secondary seal gap annually in accordance with Section 4 when the floating roof is equipped with a vapor-mounted primary seal, and

5.3.3 Maintain records of the types of volatile petroleum liquids stored, the maximum true pressure of the liquid, as stored, and the results of the inspections performed in section 5.3.1.

5.4 Compliance provision. Compliance with Section 4 shall be determined by:

5.4.1 Physically measuring the length and width of all gaps around the entire circumference of the secondary seal in each place where a 0.32 cm (1/8 in) uniform diameter probe passes freely (without forcing or binding against the seal) between the seal and tank wall and

5.4.2 Summing the area of the individual gaps.

SECTION 6 Exemptions

Any of the following types of external floating roof tanks storing liquid petroleum shall be exempt from section 3.4 as follows:

6.1 A metallic-type shoe seal in a welded tank which has a secondary seal from the top of the shoe seal to the tank wall (a shoe-mounted secondary),

6.2 External floating roof tanks storing waxy, heavy pour crudes, or

6.3 External floating roof tanks with a closure or other devices which can be demonstrated to the District to be equivalent to the seals required in section 3.4.1.

SECTION 7 Compliance

A new affected facility shall comply with the requirements of this regulation on startup.

SECTION 8 Additional Applicable Regulations

Any source subject to this regulation will also be subject to 40 CFR Part 60 Subpart K adopted by reference in Regulation 7.02.

Adopted v1/7-14-76, effective 7-14-76; amended v2/5-20-81, v3/4-21-82; v4/11-16-83; v5/2-19-86; v6/5-15-91; v7/01-17-18, v8/06-19-19.

REGULATION 7.20 Standard of Performance For New Gasoline Loading Facilities at Bulk Plants

Air Pollution Control District of Jefferson County
Jefferson County, Kentucky

Relates to: KRS Chapter 77 Air Pollution Control
Pursuant to: KRS Chapter 77 Air Pollution Control
Necessity and Function: KRS 77.180 provides that the Air Pollution Control Board may make and enforce all needful orders, rules, and regulations necessary or proper to accomplish the purposes of KRS Chapter 77. This regulation provides for the control of volatile organic compound emissions from new gasoline loading facilities at bulk plants.

SECTION 1 Applicability
This regulation applies to each new affected facility which commenced construction, modification, or reconstruction after June 13, l979.

SECTION 2 Definitions
Terms used in this regulation not defined herein shall have the meaning given them in Regulation 1.02.

2.1 "Affected facility" means a bulk gasoline plant.
2.2 "Bottom fill system" means a system of filling transport vehicle tanks through an opening that is flush with the bottom of the transport vehicle tank.
2.3 "Bulk gasoline plant" means a facility for the storage and dispensing of gasoline that employs tank trucks, trailers, railroad cars, or other mobile non-marine vessels for both incoming and outgoing gasoline transfer operations.
2.4 "Gasoline" means any petroleum distillate having a Reid vapor pressure of 4.0 pounds per square inch or greater used as a fuel for internal combustion engines.
2.5 "Submerged fill tube system" means a fill tube the discharge of which is entirely submerged when the liquid level is six inches above the bottom of the transport vehicle tank.
2.6 "Transport vehicle" means tank trucks, trailers, railroad tank cars, or barges.
2.7 "Vapor balance system" means a combination of pipes or hoses which create a closed system between the vapor spaces of a unloading tank and a received tank such that vapors displaced from the receiving tank are transferred to the tank being unloaded.

SECTION 3 Standard for Volatile Organic Compounds
3.1 The owner or operator of an affected facility shall install, maintain, and operate:
3.1.1 Stationary storage tank control devices according to Regulation 7.12 or 6.13.
3.1.2 A vapor balance system for:

3.1.2.1 Filling of stationary storage tanks from transport vehicle tanks and
3.1.2.2 Filling of transport vehicle tanks from stationary storage tanks.
3.1.3 For loading into transport vehicle tanks, either:
3.1.3.1 A submerged fill tube system or
3.1.3.2 A bottom fill system.

3.2 The vapor balance system shall be equipped with fittings which are vapor tight and will automatically close upon disconnection so as to prevent the release of organic material.

3.3 The cross-sectional area of the vapor return hose must be at least 50% of the cross-sectional area of the liquid fill line and free of flow restrictions.

3.4 The vapor balance system must be equipped with interlocking devices which prevent transfer of gasoline until the vapor return hose is connected.

3.5 Transport vehicle tank hatches shall be closed at all times during loading operations.

3.6 There shall be no leaks from the pressure/vacuum relief valves and hatch covers of the stationary storage tanks during loading.

3.7 The pressure relief valves on storage vessels and tank trucks or trailers shall be set to release at no less than 0.7 psig unless a lower setting is required by applicable fire codes.

3.8 The owner or operator shall not load gasoline into any transport vehicle or receive gasoline from any transport vehicle which does not have proper fittings for connection of the vapor balance system, nor shall the owner or operator load or receive gasoline unless the vapor balance system is properly connected and in good working order. Except as provided in section 3.9, the fittings on the transport vehicle tanks must be vapor tight and automatically close upon disconnection so as to prevent the release of organic material.

3.9 The following shall apply to the loading of a transport vehicle tank by means of a submerged fill tube system:

3.9.1 When inserted into the tank, the submerged fill tube system must form a vapor tight seal with the tank; and

3.9.2 Tank hatches are to be opened for the minimum time necessary to insert or remove the submerged fill tube system.

3.10 No owner or operator shall permit gasoline to be spilled, discarded in sewers, stored in open containers, or handled in any other manner that would result in evaporation.

3.11 On or after December 31, 1982, no owner or operator of an affected facility shall allow loading of a tank truck unless the following provisions are met:

3.11.1 Loadings of liquid product into gasoline tank trucks shall be limited to vapor-tight gasoline tank trucks using the following procedures:

3.11.1.1 No owner or operator of an affected facility shall allow loading unless the gasoline tank truck and its vapor collection system have been tested as having a pressure change of no more than seventy-five (75) mm water (three (3) in. water) in five (5) minutes when pressurized to 450 mm water (eighteen (18) in. water) and evacuated to 150 mm water (six (6) in. water) using the test procedure in section 3.11.1.2 of this regulation.

3.11.1.2 Method 27, "Determination of Vapor Tightness of Gasoline Delivery Tank Using

Pressure-Vacuum Test", specified in 40 CFR 60, Appendix A, July 1, 1991, or an alternate procedure approved by the District, shall be used to determine compliance with section 3.11.1.1 of this administrative regulation. The owner or operator of the tank truck shall have the tank truck tested annually and shall maintain records of test data, date of testing, identification of tank truck, type of repair, retest data and date. Records shall be maintained by the owner or operator of the tank truck for two (2) years after the date of testing and shall be made available upon request by the District.

3.11.2 The vapor balance system and associated equipment are designed and operated to prevent gauge pressure in the tank truck from exceeding l8 inches of water and prevent vacuum from exceeding six inches of water;

3.11.3 A pressure tap or any equivalent system as approved by the District is installed on the vapor balance system so that a liquid manometer can be connected by an inspector to the tap in order to determine compliance with section 3.11.2. The pressure tap shall be installed by the owner or operator as close as possible to the connection with the delivery tank, and shall consist of a 1/4 inch tubing connector which is compatible with the use of 3/16 inch inside diameter plastic tubing; and

3.11.4 During loading, there is no reading greater than or equal to 100% of the lower explosive limit (LEL, measured as propane) at a distance of 2.5 centimeters around the perimeter of a potential leak source associated with the vapor balance system of a bulk gasoline plant as detected by a combustible gas detector using the test procedure in section 5.

SECTION 4 Alternate Control System

The owner or operator may elect to use an alternate control system if it can be demonstrated to the District's satisfaction that the alternate system will achieve equivalent control efficiency.

SECTION 5 Compliance

5.1 A new affected facility shall comply with the requirements of this regulation on startup.

5.2 On or after December 31, 1982, the test procedure as defined in "Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems" (OAQPS 1.2-119, EPA) Appendix B or an equivalent procedure approved by the District, shall be used to determine compliance with the standard prescribed in section 3.11 during inspections conducted pursuant to KRS 77.165 or KRS 224.10-100(10).

Adopted v1/6-13-79; effective 6-13-79; amended v2/11-16-83, v3/06-19-19.

REGULATION 7.20 Standard of Performance For New Gasoline Loading Facilities at Bulk Plants

Air Pollution Control District of Jefferson County
Jefferson County, Kentucky

Relates to: KRS Chapter 77 Air Pollution Control
Pursuant to: KRS Chapter 77 Air Pollution Control
Necessity and Function: KRS 77.180 provides that the Air Pollution Control Board may make and enforce all needful orders, rules, and regulations necessary or proper to accomplish the purposes of KRS Chapter 77. This regulation provides for the control of volatile organic compound emissions from new gasoline loading facilities at bulk plants.

SECTION 1 Applicability
This regulation applies to each new affected facility which is commenced construction, modification, or reconstruction after the June 13, l979.

SECTION 2 Definitions
Terms used in this regulation not defined herein shall have the meaning given them in Regulation 1.02.

2.1 "Affected facility" means a bulk gasoline plant.

2.2 "Bottom fill system" means a system of filling transport vehicle tanks through an opening that is flush with the bottom of the transport vehicle tank.

2.3 "Bulk gasoline plant" means a facility for the storage and dispensing of gasoline that employs tank trucks, trailers, railroad cars, or other mobile non-marine vessels for both incoming and outgoing gasoline transfer operations.

2.4 "Gasoline" means any petroleum distillate having a Reid vapor pressure of 4.0 pounds per square inch or greater used as a fuel for internal combustion engines.

2.5 "Submerged fill tube system" means a fill tube the discharge of which is entirely submerged when the liquid level is six inches above the bottom of the transport vehicle tank.

2.6 "Transport vehicle" means tank trucks, trailers, railroad tank cars, or barges.

2.7 "Vapor balance system" means a combination of pipes or hoses which create a closed system between the vapor spaces of a unloading tank and a received tank such that vapors displaced from the receiving tank are transferred to the tank being unloaded.

SECTION 3 Standard for Volatile Organic Compounds
3.1 The owner or operator of an affected facility shall install, maintain, and operate:

3.1.1 Stationary storage tank control devices according to Regulation 7.12 or 6.13.

3.1.2 A vapor balance system for:

~~3.1.1.1~~3.1.2.1 Filling of stationary storage tanks from transport vehicle tanks and
~~3.1.1.2~~3.1.2.2 Filling of transport vehicle tanks from stationary storage tanks.
~~3.1.2~~3.1.3 For loading into transport vehicle tanks, either:
~~3.1.2.1~~3.1.3.1 A submerged fill tube system or
~~3.1.2.2~~3.1.3.2 A bottom fill system.

3.2 The vapor balance system shall be equipped with fittings which are vapor tight and will automatically close upon disconnection so as to prevent the release of organic material.

3.3 The cross-sectional area of the vapor return hose must be at least 50% of the cross-sectional area of the liquid fill line and free of flow restrictions.

3.4 The vapor balance system must be equipped with interlocking devices which prevent transfer of gasoline until the vapor return hose is connected.

3.5 Transport vehicle tank hatches shall be closed at all times during loading operations.

3.6 There shall be no leaks from the pressure/vacuum relief valves and hatch covers of the stationary storage tanks during loading.

3.7 The pressure relief valves on storage vessels and tank trucks or trailers shall be set to release at no less than 0.7 psig unless a lower setting is required by applicable fire codes.

3.8 The owner or operator shall not load gasoline into any transport vehicle or receive gasoline from any transport vehicle which does not have proper fittings for connection of the vapor balance system, nor shall the owner or operator load or receive gasoline unless the vapor balance system is properly connected and in good working order. Except as provided in section 3.9, the fittings on the transport vehicle tanks must be vapor tight and automatically close upon disconnection so as to prevent the release of organic material.

3.9 The following shall apply to the loading of a transport vehicle tank by means of a submerged fill tube system:

3.9.1 When inserted into the tank, the submerged fill tube system must form a vapor tight seal with the tank; and

3.9.2 Tank hatches are to be opened for the minimum time necessary to insert or remove the submerged fill tube system.

3.10 No owner or operator shall permit gasoline to be spilled, discarded in sewers, stored in open containers, or handled in any other manner that would result in evaporation.

3.11 On or after December 31, 1982, no owner or operator of an affected facility shall allow loading of a tank truck unless the following provisions are met:

3.11.1 Loadings of liquid product into gasoline tank trucks shall be limited to vapor-tight gasoline tank trucks using the following procedures:

3.11.1.1 No owner or operator of an affected facility shall allow loading unless the gasoline tank truck and its vapor collection system have been tested as having a pressure change of no more than seventy-five (75) mm water (three (3) in. water) in five (5) minutes when pressurized to 450 mm water (eighteen (18) in. water) and evacuated

to 150 mm water (six (6) in. water) using the test procedure in section 3.11.1.2 of this regulation.

3.11.1.2 Method 27, "Determination of Vapor Tightness of Gasoline Delivery Tank Using Pressure-Vacuum Test", specified in 40 CFR 60, Appendix A, July 1, 1991, or an alternate procedure approved by the District, shall be used to determine compliance with section 3.11.1.1 of this administrative regulation. The owner or operator of the tank truck shall have the tank truck tested annually and shall maintain records of test data, date of testing, identification of tank truck, type of repair, retest data and date. Records shall be maintained by the owner or operator of the tank truck for two (2) years after the date of testing and shall be made available upon request by the District.

~~The tank truck has a valid Kentucky pressure-vacuum test sticker as required by Regulation 6.37 attached and visibly displayed;~~

~~3.11.1~~3.11.2 The vapor balance system and associated equipment are designed and operated to prevent gauge pressure in the tank truck from exceeding l8 inches of water and prevent vacuum from exceeding six inches of water;

~~3.11.2~~3.11.3 A pressure tap or any equivalent system as approved by the District is installed on the vapor balance system so that a liquid manometer ~~supplied by the District~~ can be connected by an inspector to the tap in order to determine compliance with section 3.11.2. The pressure tap shall be installed by the owner or operator as close as possible to the connection with the delivery tank, and shall consist of a 1/4 inch tubing connector which is compatible with the use of 3/16 inch inside diameter plastic tubing; and

~~3.11.3~~3.11.4 During loading, there is no reading greater than or equal to 100% of the lower explosive limit (LEL, measured as propane) at a distance of 2.5 centimeters around the perimeter of a potential leak source associated with the vapor balance system of a bulk gasoline plant as detected by a combustible gas detector using the test procedure in section 5.

SECTION 4 Alternate Control System

The owner or operator may elect to use an alternate control system if it can be demonstrated to the District's satisfaction that the alternate system will achieve equivalent control efficiency.

SECTION 5 Compliance

5.1 A new affected facility shall comply with the requirements of this regulation on startup.

5.2 On or after December 31, 1982, the test procedure as defined in "Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems" (OAQPS 1.2-119, EPA) Appendix B or an equivalent procedure approved by the District, shall be used to determine compliance with the standard prescribed in section 3.11 during inspections conducted pursuant to KRS 77.165 or KRS 224.10-100(10).

Adopted v1/6-13-79; effective 6-13-79; amended v2/11-16-83, v3/06-19-19.

REGULATION 7.59 Standard of Performance for New Miscellaneous Metal Parts and Products Surface Coating Operations

Air Pollution Control District of Jefferson County
Jefferson County, Kentucky

Relates To: KRS Chapter 77 Air Pollution Control
Pursuant To: KRS Chapter 77 Air Pollution Control
Necessity and Function: KRS 77.180 provides that the Air Pollution Control Board may make and enforce all needful orders, rules, and regulations necessary or proper to accomplish the purposes of KRS Chapter 77. This regulation provides for the control of volatile organic compound emissions from new miscellaneous metal parts and products surface coating operations.

SECTION 1 Applicability
This regulation applies to each affected facility commenced on or after May 20, 1981. Any affected facility that is ever subject to this regulation will always be subject to it unless the affected facility changes its process to one not covered by this regulation.

SECTION 2 Definitions
Terms used in this regulation not defined herein shall have the meaning given to them in Regulation 1.02.

2.1 "Affected facility" means a coating line located at job shops and original equipment manufacturing industries that applies coatings on a metal substrate not elsewhere subject to regulation in this chapter.

2.2 "Air-dried coatings" means a coating that is dried by the use of air or forced warm air at temperatures up to 90°C (194°F).

2.3 "Applicator" means the mechanism or device used to apply the coating, including, but not limited to, dipping, spraying, or flow-coating.

2.4 "Clear Coating" means a coating which either lacks color or opacity, or which is transparent and uses the surface to which it is applied as a reflectant base or undertone color.

2.5 "Coating line" means a series of one or more coating applicators and any associated flashoff area, drying area, or oven wherein a coating is applied and subsequently, dried, or cured. A coating line ends with the end of the drying or curing area or prior to the beginning of the application of the next coating. It is not necessary to have an oven or a flashoff area in order to be included in this definition. This shall include, but is not limited to:

2.5.1 Mixing operations,

2.5.2 Process storage,

2.5.3 Applicators,

2.5.4 Drying operations including, but not limited to, flashoff area evaporation, oven drying, baking, curing, and polymerization,
2.5.5 Clean up operations,
2.5.6 Leaks, spills, and disposal of VOCs, and
2.5.7 Processing and handling of recovered VOCs.

2.6 "Extreme performance coating" means a coating that is designed to protect a coated part from outdoor or harsh exposure or extreme environmental conditions and that is applied to a part that, in its use as a finished product, is intended to be subjected to outdoor or harsh exposure or extreme environmental conditions.

2.7 "Flashoff area" means the space between the applicator and the oven.

2.8 "Miscellaneous metal parts and products" means items including, but not limited to:

2.8.1 Large farm machinery (harvesting, fertilizing, and planting machines, tractors, combines, etc.),
2.8.2 Small farm machinery (lawn and garden tractors, lawn mowers, rototillers, etc.),
2.8.3 Small appliances (fans, mixers, blenders, crock pots, dehumidifiers, vacuum cleaners, etc.),
2.8.4 Commercial machinery (computers and auxiliary equipment, typewriters, calculators, vending machines, etc.),
2.8.5 Industrial machinery (pumps, compressors, conveyor components, fans, blowers, transformers, etc.),
2.8.6 Fabricated metal products (metal covered doors, frames, etc.), and
2.8.7 Any other industrial category which coats metal parts or products under the Standard Industrial Classification Code of Major Group 33 (primary metal industries), Major Group 34 (fabricated metal products), Major Group 35 (nonelectric machinery), Major Group 36 (electrical machinery), Major Group 37 (transportation equipment), Major Group 38 (miscellaneous instruments), or Major Group 39 (miscellaneous manufacturing industries).

2.9 "Outdoor or harsh exposure or extreme environmental conditions" means exposure to any of the following: year round weather conditions, temperatures consistently above 95°C, detergents, scouring solvents, corrosive atmospheres, and similar environmental conditions.

2.10 "Prime coat" means the first of two or more films of coating applied in an operation.

2.11 "Process storage" means mixing tanks, holding tanks, and other tanks, drums, or other containers that contain surface coatings, volatile organic compounds, or recovered volatile organic compounds, but does not mean storage tanks that are subject to Regulation 6.13 or 7.12.

2.12 "Single coat" means only one film of coating is applied to the metal substrate.

2.13 "Topcoat" means the final film or series of films of coating applied in a two coat (or more) operation.

SECTION 3 Standards for Volatile Organic Compounds

3.1 A person shall not cause or allow the emission of VOC from any affected facility resulting from the coating of metallic surfaces in excess of the applicable emission rate as follows:

3.1.1 0.52 kg of VOC/l (4.3 lb of VOC/gal) of coating, excluding water and exempt solvents, as applied for clear coatings,

3.1.2 0.42 kg of VOC/l (3.5 lb of VOC/gal) of coating, excluding water and exempt solvents, as applied for air-dried coatings,

3.1.3 0.42 kg of VOC/l (3.5 lb of VOC/gal) of coating, excluding water and exempt solvents, as applied for extreme performance coatings, or

3.1.4 0.36 kg of VOC/l (3.0 lb of VOC/gal) of coating, excluding water and exempt solvents, as applied for all other coatings.

3.2 Compliance with the emission limits specified in section 3.1 shall be based upon the coatings used for the affected facility during a calendar-day averaging period. The District may specifically authorize compliance to be based upon a longer averaging period that shall not exceed 1 calendar month.

3.3 If more than 1 limit of section 3.1 would be applicable for a specific coating, the least stringent limit shall apply.

3.4 Upon written request by the owner or operator of the affected facility, and approval by the District, the emission limits specified in section 3.1 may be achieved by an equivalent emission limit expressed in kg of VOC/l (lb of VOC/gal) of coating solids, as applied. The equivalent emission limit shall be established by the following equation:

$$A = \frac{E}{S}$$

where:

A = Allowable equivalent emission limit, in kg of VOC/l (lb of VOC/gal) of coating solids, as applied.

E = Applicable emission limit as specified in section 3.1, in kg of VOC/l (lb of VOC/gal) of coating, excluding water and exempt solvent, as applied.

S = Solids volume fraction representative of a compliance coating, in liter (gallon) of solids per liter (gallon) of coating, excluding water and exempt solvents, as applied. The value of "S" shall be determined by using one of the following equations:

$$S = 1 - \frac{E}{0.88} \; Where\ E\ is\ in\ kg\ of\ VOC\ /\ l$$

$$S = 1 - \frac{E}{7.36} \; Where\ E\ is\ in\ lb\ of\ VOC\ /\ gal$$

SECTION 4 Compliance

4.1 A new affected facility shall comply with the requirements of this regulation on startup.

4.2 In all cases, the design of any control system is subject to approval by the District.

4.3 Compliance with an emission limit in section 3.4 shall be demonstrated by a material balance except in those cases where the District determines that a material balance is not possible. For those cases where a material balance is not possible, compliance will be determined based upon an engineering analysis by the District of the control system design, control device efficiency, control system capture efficiency, and any other factors that could influence the performance of the system. If so requested by the District, performance tests as specified by the District shall be conducted in order to determine the efficiency of the control device. The control system capture efficiency shall be measured according to methods specified in Regulation 1.05.

4.4 Whenever deemed necessary by the District, the District shall obtain samples of the coatings used at an affected facility to verify compliance with Section 3.

4.4.1 The method of analysis for coatings is EPA Method 24.

4.5 For each coating line that applies multiple coatings, all of which are subject to the same numerical emission limitation in section 3.1, during the same averaging period, e.g., all coatings used on the line are subject to 0.42 kg of VOC/l (3.5 lb of VOC/gal) of coating, excluding water and exempt solvents, the daily weighted VOC content, calculated in accordance with the procedure in section 4.4.1, shall not exceed the coating VOC content limit corresponding to the category of coating used.

4.5.1 The averaging period weighted average VOC content, which means the VOC content of two or more coatings as applied on a coating line during any averaging period and weighted according to the fraction of the total coating volume that each coating represents, shall be calculated using the following equation:

$$VOC_w = \sum_{i=1}^{n} \frac{V_i C_i}{VT}$$

where:

VOC_w = The average VOC content of two or more coatings as applied each averaging period on a coating line, in kg VOC/l (lb of VOC/gal) of coating, excluding water and exempt solvents.

V_i = The volume of each coating as applied each averaging period on a coating line in units of liters (gallons), excluding water and exempt solvents.

C_i = The VOC content of each coating as applied each averaging period on a coating line in units of kg of VOC/l (lb of VOC/gal) of coating, excluding water and exempt solvents.

VT = The total volume of all coatings as applied each averaging period on a coating line in units of liters (gallons), excluding water and exempt solvents.

n = The number of different coatings as applied each averaging period on a coating line.

SECTION 5 Exemptions

5.1 The surface coating of the following metal parts and products, or operations, are exempt from the standards in section 3 of this regulation:

5.1.1 The exterior of airplanes and marine vessels, but not parts for the exterior of airplanes and marine vessels that are coated as a separate manufacturing or coating operation,

5.1.2 Automobile refinishing,

5.1.3 Customized top coating of automobiles and trucks if production is less than 35 vehicles per day,

5.1.4 Metallic surfaces that are subject to Regulation 6.16, 6.17, 6.19, 7.02, or 7.55, and

5.1.5 Parts consisting of both metallic and nonmetallic components, if a demonstration is made, to the satisfaction of the District, that the limits of this rule cannot be met due to the presence of the nonmetallic component. In this case, Regulation 7.25 applies to the coating of these parts.

5.2 Any affected facility shall be exempt from Section 3 if the total VOC emissions from all affected facilities subject to this regulation are less than or equal to five tons per year (potential emissions prior to any add-on controls).

SECTION 6 Recordkeeping

6.1 An owner or operator of an affected facility subject to this regulation shall maintain records of operations for each averaging period for the most recent two-year period. The records shall be made available to the District upon request. The records shall include, but not be limited to, the following:

6.1.1 The regulation and section number applicable to the affected facility for which the records are being maintained,

6.1.2 The application method and substrate type (metal, plastic, etc.),

6.1.3 The amount and type of coatings (including catalyst and reducer for multicomponent coatings) and solvent (including exempt compounds) used at each point of application during the averaging period. The District may specifically authorize the usage record to reflect a period longer than the compliance averaging period, with the usage prorated for each compliance averaging period by a method approved by the District. In this case, the usage record period shall not exceed 1 calendar month,

6.1.4 The VOC content as applied in each coating and solvent,

6.1.5 The date, or usage record period, for each application of coating and solvent,

6.1.6 The amount of surface preparation, clean-up, wash-up of solvent (including exempt compounds) used and the VOC content of each material used during the averaging period. The District may specifically authorize the usage record to reflect a period longer than the compliance averaging period, with the usage prorated for each compliance averaging period by a method approved by the District. In this case, the usage record period shall not exceed 1 calendar month, and

6.1.7 Oven temperature, where applicable.

6.2 The VOC content shall be calculated using a percent solids basis (excluding water and exempt solvents) for coatings using EPA Method 24.

6.3 When an affected facility utilizes add-on controls to achieve compliance, documentation will be necessary to assure proper operation. Examples of some controls and related information are:

6.3.1 Thermal incineration: combustion temperature, inlet and outlet VOC concentration from emission tests, how and when these concentrations were determined, destruction or removal efficiency, and manufacturer data,

6.3.2 Catalytic incineration: exhaust gas temperature, change in temperature across catalyst bed, date of last change of catalyst bed, inlet and outlet VOC concentration from emission test, how and when these concentrations were determined, destruction or removal efficiency, and manufacturer data, and

6.3.3 Condenser: inlet temperature of cooling medium, outlet temperature of cooling medium, inlet and outlet VOC concentration from emission tests, how and when these concentrations were determined, removal efficiency, and manufacturer data.

6.4 When an affected facility utilizes add-on controls, compliance shall be determined by using EPA Method 25.

6.5 In lieu of the records required by sections 6.1 through 6.4 above, any facility claiming an exemption pursuant to Section 5 shall keep records sufficient to demonstrate applicability of the claimed exemption. For facilities exempt pursuant to section 5.2, this shall include but not be limited to record of the total potential VOC emissions from all processes or process operations subject to this regulation prior to any add-on controls on a rolling twelve month basis.

SECTION 7 Deviations

Deviations from the standards and limitations in this regulation, when supported by adequate technical information, will be considered by the District on a case-by-case basis to allow for technological or economic circumstances that are unique to an affected facility. However, these deviations will require federal approval pursuant to Regulation 1.08.

Adopted v1/5-20-81; effective 5-20-81; amended v2/4-21-82, v3/2-19-86, v4/5-15-91, v5/4-23-96, v6/01-17-18, v7/06-19-19.

REGULATION 7.59 Standard of Performance for New Miscellaneous Metal Parts and Products Surface Coating Operations

Air Pollution Control District of Jefferson County
Jefferson County, Kentucky

Relates To: KRS Chapter 77 Air Pollution Control
Pursuant To: KRS Chapter 77 Air Pollution Control
Necessity and Function: KRS 77.180 provides that the Air Pollution Control Board may make and enforce all needful orders, rules, and regulations necessary or proper to accomplish the purposes of KRS Chapter 77. This regulation provides for the control of volatile organic compound emissions from new miscellaneous metal parts and products surface coating operations.

SECTION 1 Applicability
This regulation applies to each affected facility commenced on or after May 20, 1981. Any affected facility that is ever subject to this regulation will always be subject to it unless the affected facility changes its process to one not covered by this regulation.

SECTION 2 Definitions
Terms used in this regulation not defined herein shall have the meaning given to them in Regulation 1.02.

2.1 "Affected facility" means a coating line located at job shops and original equipment manufacturing industries that applies coatings on a metal substrate not elsewhere subject to regulation in this chapter.

2.2 "Air-dried coatings" means a coating that is dried by the use of air or forced warm air at temperatures up to 90°C (194°F).

2.3 "Applicator" means the mechanism or device used to apply the coating, including, but not limited to, dipping, spraying, or flow-coating.

2.4 "Clear Coating" means a coating which either lacks color or opacity, or which is transparent and uses the surface to which it is applied as a reflectant base or undertone color.

2.5 "Coating line" means a series of one or more coating applicators and any associated flashoff area, drying area, or oven wherein a coating is applied and subsequently, dried, or cured. A coating line ends with the end of the drying or curing area or prior to the beginning of the application of the next coating. It is not necessary to have an oven or a flashoff area in order to be included in this definition. This shall include, but is not limited to:

2.5.1 Mixing operations,

2.5.2 Process storage,

2.5.3 Applicators,

2.5.4 Drying operations including, but not limited to, flashoff area evaporation, oven drying, baking, curing, and polymerization,
2.5.5 Clean up operations,
2.5.6 Leaks, spills, and disposal of VOCs, and
2.5.7 Processing and handling of recovered VOCs.
2.6 "Extreme performance coating" means a coating that is designed to protect a coated part from outdoor or harsh exposure or extreme environmental conditions and that is applied to a part that, in its use as a finished product, is intended to be subjected to outdoor or harsh exposure or extreme environmental conditions.
2.7 "Flashoff area" means the space between the applicator and the oven.
2.8 "Miscellaneous metal parts and products" means items including, but not limited to:
2.8.1 Large farm machinery (harvesting, fertilizing, and planting machines, tractors, combines, etc.),
2.8.2 Small farm machinery (lawn and garden tractors, lawn mowers, rototillers, etc.),
2.8.3 Small appliances (fans, mixers, blenders, crock pots, dehumidifiers, vacuum cleaners, etc.),
2.8.4 Commercial machinery (computers and auxiliary equipment, typewriters, calculators, vending machines, etc.),
2.8.5 Industrial machinery (pumps, compressors, conveyor components, fans, blowers, transformers, etc.),
2.8.6 Fabricated metal products (metal covered doors, frames, etc.), and
2.8.7 Any other industrial category which coats metal parts or products under the Standard Industrial Classification Code of Major Group 33 (primary metal industries), Major Group 34 (fabricated metal products), Major Group 35 (nonelectric machinery), Major Group 36 (electrical machinery), Major Group 37 (transportation equipment), Major Group 38 (miscellaneous instruments), or Major Group 39 (miscellaneous manufacturing industries).
2.9 "Outdoor or harsh exposure or extreme environmental conditions" means exposure to any of the following: year round weather conditions, temperatures consistently above 95°C, detergents, scouring solvents, corrosive atmospheres, and similar environmental conditions.
2.10 "Prime coat" means the first of two or more films of coating applied in an operation.
2.11 "Process storage" means mixing tanks, holding tanks, and other tanks, drums, or other containers that contain surface coatings, volatile organic compounds, or recovered volatile organic compounds, but does not mean storage tanks that are subject to Regulation 6.13 or 7.12.
2.12 "Single coat" means only one film of coating is applied to the metal substrate.
2.13 "Topcoat" means the final film or series of films of coating applied in a two coat (or more) operation.

SECTION 3 Standards for Volatile Organic Compounds

3.1 A person shall not cause or allow the emission of VOC from any affected facility resulting from the coating of metallic surfaces in excess of the applicable emission rate as follows:

3.1.1 0.52 kg of VOC/l (4.3 lb of VOC/gal) of coating, excluding water and exempt solvents, as applied for clear coatings,

3.1.2 0.42 kg of VOC/l (3.5 lb of VOC/gal) of coating, excluding water and exempt solvents, as applied for air-dried coatings,

3.1.3 0.42 kg of VOC/l (3.5 lb of VOC/gal) of coating, excluding water and exempt solvents, as applied for extreme performance coatings, or

3.1.4 0.36 kg of VOC/l (3.0 lb of VOC/gal) of coating, excluding water and exempt solvents, as applied for all other coatings.

3.2 Compliance with the emission limits specified in section 3.1 shall be based upon the coatings used for the affected facility during a calendar-day averaging period. The District may specifically authorize compliance to be based upon a longer averaging period that shall not exceed 1 calendar month.

3.3 If more than 1 limit of section 3.1 would be applicable for a specific coating, the least stringent limit shall apply.

3.4 Upon written request by the owner or operator of the affected facility, and approval by the District, the emission limits specified in section 3.1 may be achieved by an equivalent emission limit expressed in kg of VOC/l (lb of VOC/gal) of coating solids, as applied. The equivalent emission limit shall be established by the following equation:

$$A = \frac{E}{S}$$

where:

A = Allowable equivalent emission limit, in kg of VOC/l (lb of VOC/gal) of coating solids, as applied.

E = Applicable emission limit as specified in section 3.1, in kg of VOC/l (lb of VOC/gal) of coating, excluding water and exempt solvent, as applied.

S = Solids volume fraction representative of a compliance coating, in liter (gallon) of solids per liter (gallon) of coating, excluding water and exempt solvents, as applied. The value of "S" shall be determined by using one of the following equations:

$$S = 1 - \frac{E}{0.88} \; Where\ E\ is\ in\ kg\ of\ VOC\ /\ l$$

$$S = 1 - \frac{E}{7.36} \; Where\ E\ is\ in\ lb\ of\ VOC\ /\ gal$$

SECTION 4 Compliance

4.1 A new affected facility shall comply with the requirements of this regulation on startup.

4.2 In all cases, the design of any control system is subject to approval by the District.

4.3 Compliance with an emission limit in section 3.4 shall be demonstrated by a material balance except in those cases where the District determines that a material balance is not possible. For those cases where a material balance is not possible, compliance will be determined based upon an engineering analysis by the District of the control system design, control device efficiency, control system capture efficiency, and any other factors that could influence the performance of the system. If so requested by the District, performance tests as specified by the District shall be conducted in order to determine the efficiency of the control device. The control system capture efficiency shall be measured according to methods specified in Regulation 1.05.

4.4 Whenever deemed necessary by the District, the District shall obtain samples of the coatings used at an affected facility to verify compliance with Section 3.

4.4.1 The method of analysis for coatings is EPA Method 24.

4.5 For each coating line that applies multiple coatings, all of which are subject to the same numerical emission limitation in section 3.1, during the same averaging period, e.g., all coatings used on the line are subject to 0.42 kg of VOC/l (3.5 lb of VOC/gal) of coating, excluding water and exempt solvents, the daily weighted VOC content, calculated in accordance with the procedure in section 4.4.1, shall not exceed the coating VOC content limit corresponding to the category of coating used.

4.5.1 The averaging period weighted average VOC content, which means the VOC content of two or more coatings as applied on a coating line during any averaging period and weighted according to the fraction of the total coating volume that each coating represents, shall be calculated using the following equation:

$$VOC_w = \sum_{i=1}^{n} \frac{V_i C_i}{VT}$$

where:

VOC_w = The average VOC content of two or more coatings as applied each averaging period on a coating line, in kg VOC/l (lb of VOC/gal) of coating, excluding water and exempt solvents.

V_i = The volume of each coating as applied each averaging period on a coating line in units of liters (gallons), excluding water and exempt solvents.

C_i = The VOC content of each coating as applied each averaging period on a coating line in units of kg of VOC/l (lb of VOC/gal) of coating, excluding water and exempt solvents.

VT = The total volume of all coatings as applied each averaging period on a coating line in units of liters (gallons), excluding water and exempt solvents.

n = The number of different coatings as applied each averaging period on a coating line.

SECTION 5 Exemptions

5.1 The surface coating of the following metal parts and products, or operations, are exempt from th~~is~~e standards in section 3 of this regulation:

5.1.1 The exterior of airplanes and marine vessels, but not parts for the exterior of airplanes and marine vessels that are coated as a separate manufacturing or coating operation,

5.1.2 Automobile refinishing,

5.1.3 Customized top coating of automobiles and trucks if production is less than 35 vehicles per day,

5.1.4 Metallic surfaces that are subject to Regulation 6.16, 6.17, 6.19, 7.02, or 7.55, and

5.1.5 Parts consisting of both metallic and nonmetallic components, if a demonstration is made, to the satisfaction of the District, that the limits of this rule cannot be met due to the presence of the nonmetallic component. In this case, Regulation 7.25 applies to the coating of these parts.

5.2 Any affected facility shall be exempt from Section 3 if the total VOC emissions from all affected facilities subject to this regulation are less than or equal to five tons per year (potential emissions prior to any add-on controls).

SECTION 6 Recordkeeping

6.1 An owner or operator of an affected facility subject to this regulation shall maintain records of operations for each averaging period for the most recent two-year period. The records shall be made available to the District upon request. The records shall include, but not be limited to, the following:

6.1.1 The regulation and section number applicable to the affected facility for which the records are being maintained,

6.1.2 The application method and substrate type (metal, plastic, etc.),

6.1.3 The amount and type of coatings (including catalyst and reducer for multicomponent coatings) and solvent (including exempt compounds) used at each point of application during the averaging period. The District may specifically authorize the usage record to reflect a period longer than the compliance averaging period, with the usage prorated for each compliance averaging period by a method approved by the District. In this case, the usage record period shall not exceed 1 calendar month,

6.1.4 The VOC content as applied in each coating and solvent,

6.1.5 The date, or usage record period, for each application of coating and solvent,

6.1.6 The amount of surface preparation, clean-up, wash-up of solvent (including exempt compounds) used and the VOC content of each material used during the averaging period. The District may specifically authorize the usage record to reflect a period longer than the compliance averaging period, with the usage prorated for each compliance averaging period by a method approved by the District. In this case, the usage record period shall not exceed 1 calendar month, and

6.1.7 Oven temperature, where applicable.

6.2 The VOC content shall be calculated using a percent solids basis (excluding water and exempt solvents) for coatings using EPA Method 24.

6.3 When an affected facility utilizes add-on controls to achieve compliance, documentation will be necessary to assure proper operation. Examples of some controls and related information are:

6.3.1 Thermal incineration: combustion temperature, inlet and outlet VOC concentration from emission tests, how and when these concentrations were determined, destruction or removal efficiency, and manufacturer data,

6.3.2 Catalytic incineration: exhaust gas temperature, change in temperature across catalyst bed, date of last change of catalyst bed, inlet and outlet VOC concentration from emission test, how and when these concentrations were determined, destruction or removal efficiency, and manufacturer data, and

6.3.3 Condenser: inlet temperature of cooling medium, outlet temperature of cooling medium, inlet and outlet VOC concentration from emission tests, how and when these concentrations were determined, removal efficiency, and manufacturer data.

6.4 When an affected facility utilizes add-on controls, compliance shall be determined by using EPA Method 25.

6.5 In lieu of the records required by sections 6.1 through 6.4 above, any facility claiming an exemption pursuant to Section 5 shall keep records sufficient to demonstrate applicability of the claimed exemption. For facilities exempt pursuant to section 5.2, this shall include but not be limited to record of the total potential VOC emissions from all processes or process operations subject to this regulation prior to any add-on controls on a rolling twelve month basis.

SECTION 7 Deviations

Deviations from the standards and limitations in this regulation, when supported by adequate technical information, will be considered by the District on a case-by-case basis to allow for technological or economic circumstances that are unique to an affected facility. However, these deviations will require federal approval pursuant to Regulation 1.08.

Adopted v1/5-20-81; effective 5-20-81; amended v2/4-21-82, v3/2-19-86, v4/5-15-91, v5/4-23-96, v6/01-17-18, v7/06-19-19.